THE PIANIST'S THUMB

HOWARD WELLS

Marion Lyphenheme
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THE PIANIST'S THUMB

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A TEXT BOOK
for TEACHERS and PUPILS

BY
HOWARD WELLS
Author of
EARS, BRAIN and FINGERS

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Chapter I

INTRODUCTORY

(To be read before making use of the book.)

Accident insurance experts estimate the value of the thumb as fifty per cent of the value of the entire hand. Its general usefulness is largely due to its position opposite the fingers. Without the thumb, the ability to grasp and hold objects with the hand would be lost.

For the pianist, the value of the thumb is beyond estimation, and the difficulties connected with the training of the thumb to meet the requirements of the key board are in proportion to the relative importance of the thumb and the fingers.

Since the time of Bach, who was the first composer to make use of the thumb, except in stretches, the chief obstacle in developing the pianist's technical facility has been this unruly member of his hand. The thumb has been called "the pivot of the pianist's technical difficulties."

With students, if there is any difficulty in playing brilliant cadenzas, or passages requiring lightness and velocity, the thumb is generally at fault. Its position in the hand, and its natural clumsiness make it impossible for the player to maintain lightness of the wrist unless the thumb has been

properly trained. A stiff wrist often means a stiff thumb. This statement does not apply simply to passages where the thumb must reach under the hand, as in scales and arpeggios, but also to passages where the thumb reaches out from the side of the hand.

Giving too much thought to the construction of the hand, and to the mechanical side of piano playing is a great mistake. It tends to make the player self-conscious, and may greatly hamper his ability as an interpreter, but a certain amount of technical training must be done for every hand, no matter how favorable its natural formation may be. No successful pianist has escaped technical drudgery, although many artists have forgotten the process which went to make up their equipment, just as we all forget our childhood training. Playing the piano is an unnatural process for which the hand must be adapted and "broken in."

This process may be greatly facilitated for the student by appealing to his intelligence. If he fully understands what he is working for he will not waste so much time at the key board. For the majority of students, practising means sitting at the piano, and drumming away at an exercise simply because it was given them by their teacher. They have in mind only the vague idea of "getting the exercise," but seldom have any conception of what the exercise can and should do for their technical development.

My theory is that the student cannot have too definite an idea of what he is trying to do, and why he is trying to do it. For this reason, I shall make an effort to classify the thumb exercises that I introduce, and shall try to specify the direct purpose of each one.

There has been an abundance of material written for the training of the thumb. Czerny, Cramer, Tausig, Villoing,

Clementi, Kullak, and almost every writer of technical studies has given innumerable exercises which are valuable for thumb training: and all piano literature abounds in passages which illustrate various uses of the thumb, but much time can be saved, and far better results attained by culling out some of the best exercises and passages, and studying their purposes and possibilities. *The value of an exercise depends upon the intelligence with which it is practised.*

SUMMARY OF WHAT IS REQUIRED OF THE THUMB

First of all, the thumb must be made independent of the hand. It must be able to move both horizontally and perpendicularly with lightness, ease, and rapidity without jarring the hand or stiffening the wrist.

It must be able to dart under the hand, making long or short stretches with quickness and accuracy, striking its key heavily or lightly, as the case may require.

It must be able to reach out from the side of the hand, striking varying intervals with accuracy and ease.

It must be trained not to interfere with the elasticity of the wrist when extended from the hand in wrist staccato passages in playing octaves and chords.

It must be trained to receive the weight of the arm in melody playing when required.

In all its uses, the thumb, in spite of its clumsiness of build, and its unfavorable position on the side of the hand, must compete with the fingers in lightness and dexterity. In other words, its training must develop lightness, elasticity, firmness, endurance, velocity and accuracy, both in reaching under the hand, and in extending from the side of it.

Chapter II

THUMB TRAINING FOR CHILDREN

Note:—The following exercises, Nos. 1, 2, 3, 4 and 5 should be given in the first piano lessons. The idea of light thumb action should be impressed on the child as soon as he begins to play notes with the thumb. Exercises 6 and 7, which commence training the thumb to reach under the hand, may be given later.

Exercise 1. *To develop independence and light, free action of the thumb.*

Rest the arm on a table or flat surface. The arm must be relaxed, and this condition can be brought about more easily at first by placing the arm in a position where it naturally rests. (Children get the idea of relaxation by being told to let the arm lie down, and go to sleep.) When the arm is resting on the table fold the fingers under the hand, making a fist (not tightly clenched), now move the thumb up and down gently, having the tip of the thumb turned in slightly.

Note:—If the thumb tip is turned in too much the wrist will be stiff.

In explanation of this unusual position of the hand, I would like to say that when the fingers are folded under the hand in this way, it is not possible for the thumb to move incorrectly. It is compelled to use the joint near the wrist. Neither is it possible for the fingers to move with the thumb, hence the thumb is compelled to act independently, and it is self evident that the hand must remain quiet. (See Fig. 1)

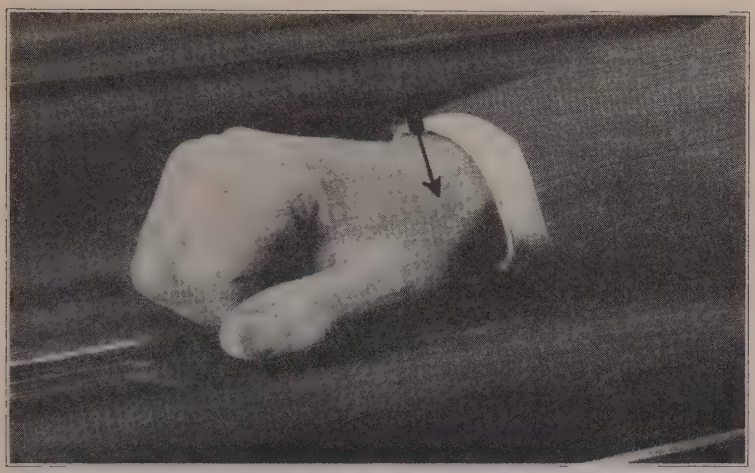


FIGURE 1

I have made use of this position with pupils of all grades for more than twenty years with good results. This exercise should give the student a clear idea of what the feeling of light, free thumb action is, which can now become some thing definite for him to strive for. To me it seems useless to say to a student "your thumb must be relaxed," unless one gives him an idea of what the feeling of a relaxed thumb is, and also shows him how to get this feeling.

EXERCISE 2. *To develop light, free action of the thumb when the arm is at the side of the body instead of resting on the table.*

Here the hand rests on the table, fingers folded under, as in Fig. 1, but the arm is now at the side of the body, as it is when playing the piano. The thumb moves up and down with the same light action used in Ex. 1. The arm must be kept relaxed. The pupil may test the relaxation of his arm by removing his hand from the table now and then, and

swinging his arm at his side to give himself the feeling of relaxation which he must retain during this exercise. These preliminary steps are most important, as will be seen in the results later on.

EXERCISE 3. *To develop light thumb action when the thumb sounds a key of the piano instead of falling on the table.* (*Fingers folded under.*)

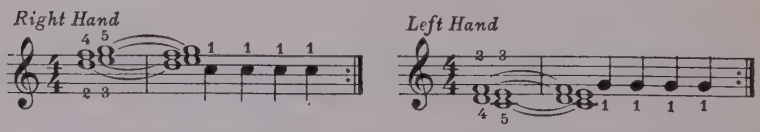
Hand in the same position as in the two previous exercises, but resting on the key board of the piano, instead of the table. The lightly clenched fist of the right hand rests on the keys, *D, E, F* and *G*. The thumb is over *C*. The thumb should rise and fall with the same free, easy action it had on the table. If necessary there should be a comparison made between the two.

When the left hand plays the exercise, the fingers rest on *C, D, E* and *F*, and the thumb falls on *G*.

All these exercises should be practised slowly, with separate hands, and with a light touch.

Note:—The keys upon which the fingers are resting are depressed by the weight of the relaxed arm.

EXERCISE 4. *Light, free thumb action with the hand in proper playing position on the key board. See Fig.* 2.



The pupil should be seated far enough from the piano to allow the arms to move freely from left to right. The height of the seat is determined by the length of the upper arm. The elbow should be on a level with the key board. The wrist, in scale and arpeggio exercises, as well as in the

scales and arpeggios, is held slightly higher than for the elementary finger work. There should be an arch between the thumb and hand to permit the thumb to pass under. The thumb is held out, and somewhat curved to give it greater freedom of movement.

FIGURE 2

In this exercise the fingers are curved, and rest on the keys to help the hand remain quiet while the thumb plays the quarter notes. The thumb is always turned slightly inward on the white keys, to avoid striking two keys at once. (Later on when the black keys are used, the thumb crosses its key to make its position more secure.) The arm must be so relaxed that there is a sensation of the arm resting on the finger tips; and not a feeling that the fingers are digging into the keys, and holding them down by main force.

Resting the fingers on the keys for four counts, as indicated in the first measure, helps to produce this feeling of relaxation. If the preliminary work has been properly done it will not be difficult.

With small weak hands it is not easy to keep the finger tips in a curved position. A child should not be expected to maintain this position at first. His ability to do this should be brought about gradually. Hand position should be *developed*, not *forced*. The main thing is to have the arm relaxed, and the thumb action light and free. There should be no effort in any of these exercises to produce a loud tone. It should always be kept very light. Sometimes it is helpful simply to tap the key with the thumb, not making any sound. In this way one can ascertain whether it moves as freely when it produces a tone. The thumb motion should be made by the thumb joint near the wrist. See Fig. 1 (the arrow points to the thumb joint). The thumb should not be raised too high, and should fall onto its key without jarring the hand or stiffening the wrist. (See height of thumb in Fig. 2.)

EXERCISE 5. *To improve the lightness and independence of the thumb.*

Place the hand in the position required by Ex. 3, and play that exercise, making several repetitions. When this has been done, do not remove the hand from the key board; leave the thumb resting on its key while you unfold the fingers so that they are in playing position, as in Ex. 4. Now play Ex. 4, repeating the thumb note with the same light action it had in Ex. 3. By alternating Ex. 3 and Ex. 4 in this way the thumb will soon acquire considerable independence from the hand, and some freedom of motion.

From this stage of the work there should be an effort made to apply this lightness of the thumb to the studies and pieces which the pupil is playing. *It is one thing to be able to do an exercise correctly, and still another to make its*

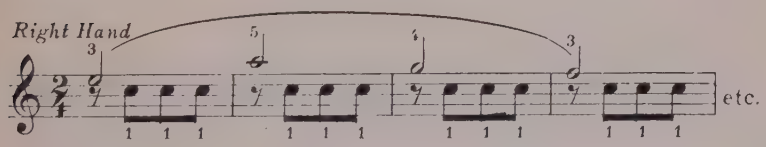
influence felt in the playing, so that an "unconscious technic" is developed.

Short Excerpts of Thumb Passages

The examples quoted here are from compositions of different grades. They all illustrate the use of light thumb action with quiet hand.

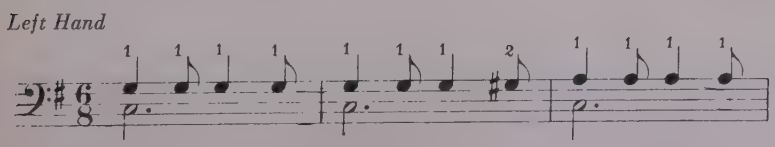
Gurlitt's *School of Velocity* for Beginners Op. 141, Ditson Edition, No. 342, furnishes examples in Etudes 2, 3, 16 and 8.

From Etude 8.

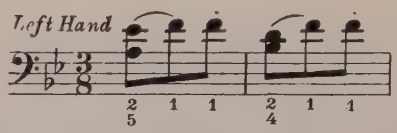


Here the 3rd, 5th, 4th, and 3rd fingers in succession are used as supporting fingers. They form the melody for which the repeated thumb note serves as an accompaniment. The arm should be relaxed, as described in Ex. 4. This will give it the feeling of resting on the supporting finger, and will help to make the melody notes more singing. The thumb note should be very light.

A repeated thumb note is often made to serve as part of an accompaniment. *Ghost in the Chimney* by Kullak has this use of the thumb:—

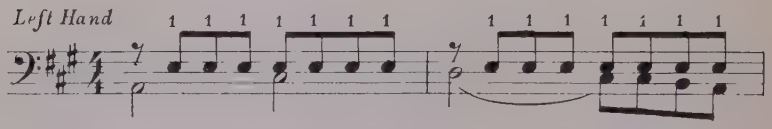


The Nightingale by the same composer furnishes this example:—

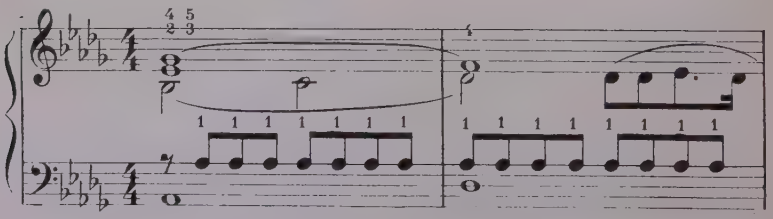


The left hand part of *Prelude No.* 5 by Heller, Op. 81 has a soft accompaniment played by the thumb. This repeated note should be scarcely perceptible. If the thumb action here is heavy, the beauty of the piece is destroyed.

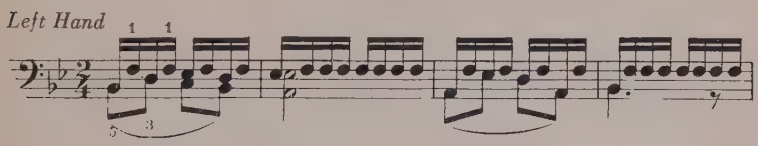
In the Mendelssohn *Songs Without Words* the thumb often forms an important part of the accompaniment. In Song No. 4 the *E* which is repeated by the thumb should be scarcely audible.



A more difficult example of a repeated thumb note being a feature of the accompaniment is found in *Prelude No.* 15, *Op.* 28, Chopin.



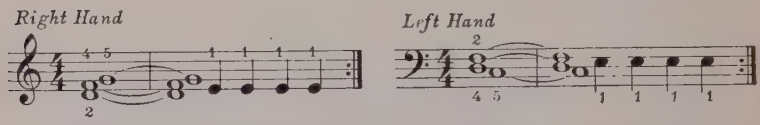
Piano literature, both easy and difficult, furnishes many examples of a repeated thumb note which forms a part of an accompanying figure, which must be kept in the background. Illustrations of this may be found in Czerny Op. 748, Nos. 2, 4, 5, 12 and 18. Beethoven in nearly all of the Sonatas left instances of this use of the thumb as in the following quotation from Op. 22:—



Chapter III

THE BEGINNING OF THE SCALE

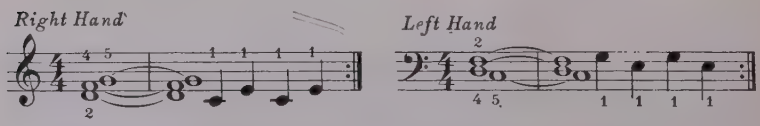
Exercise 6. *The thumb plays a key under the hand while the fingers rest on the keys, and the arm is relaxed.*



Here the thumb strikes a key under the hand while the 2nd, 4th and 5th rest on the keys. The 3rd finger is left free. The hand must be quiet, and the wrist loose. Care must be taken to move the thumb by the joint near the wrist. (See Fig. 1.) The elbow must not help the thumb to reach under the hand. The tip of the thumb should not bend inward more as it reaches for its key. The reaching should be done only by the thumb joint.

Note:—See page 69 in the Appendix for thumb exercises adapted to the use of tiny hands, that are unable to make the stretch required in this exercise.

Exercise 7. *The thumb is required to make a skip of a third without jarring the hand.*



Here, as in all the exercises the thumb must play lightly, and not be raised high. (See Fig. 2.)

EXERCISE 8. *To prepare the thumb for the stretch of a fourth, and also to develop the elasticity and strength of the thumb muscles.*

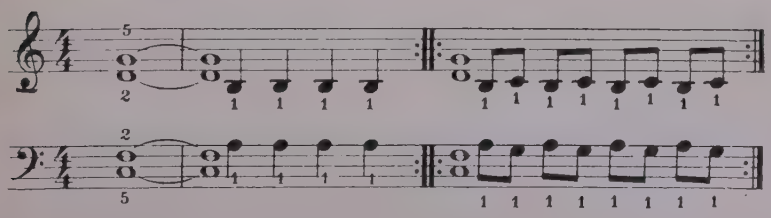
The position for this exercise is the same as in Ex. 3, Chapter II. The fingers are folded under the hand. The 2nd, 3rd, 4th and 5th fingers of the right hand rest on *D*, *E*, *F* and *G*. The thumb must reach out and strike *B* lightly. The action must become as free as it is when the thumb strikes *C*, which is nearer the hand. The two keys, *C* and *B* are to be struck by the thumb alternately.

The fingers of the left hand rest on *C*, *D*, *E* and *F*. The thumb strikes *A* lightly. Then strikes *A* and *G* alternately.

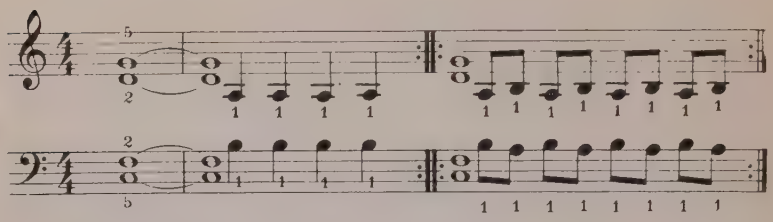
Note:—By means of this exercise even a very stubborn thumb may be prepared in a short time to reach an interval that at first seems impossible for it, and the thumb will become able to move more freely when obliged to play in a position slightly extended from the hand.

EXERCISE 9. *The thumb strikes a key a short distance from the hand while two fingers rest on the keys.*

If the arm is relaxed the fingers will feel as if they were resting on the keys, and not as if they were digging into them. Before beginning to play with the thumb, rest the fingers on their keys for four counts, as indicated. This will insure the relaxation of the arm before you start to play.



EXERCISE 10. *A longer reach from the side of the hand, (if the hand is large enough to take it.)*



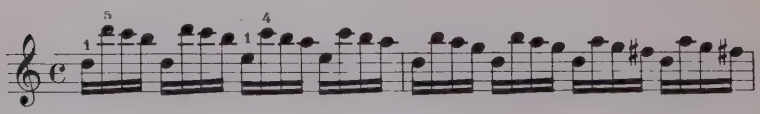
The thumb is constantly required to play notes a distance from the side of the hand. The more extended the reach, the more difficult it is to keep the thumb relaxed. Care must be taken not to give the pupil passages of this kind that are too taxing.

A few illustrations of a medium grade of difficulty are here given. (Naturally these are not for beginners.)

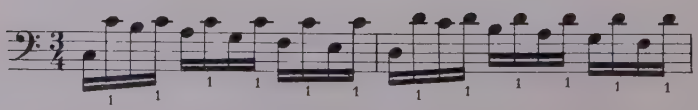
THUMB PASSAGES

In the following measures taken from Czerny Op. 299, if the thumb is not kept relaxed, the action of the fingers cannot be free.

Czerny Op. 299, No. 6.

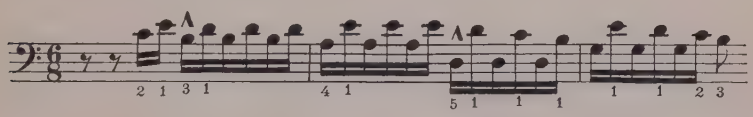


Czerny Op. 299, No. 20.



When a pupil attempts to play the Mendelssohn *Spinning Song* rapidly, he generally finds that his hand stiffens while playing portions of the left hand accompaniment. He may not realize it, but the root of the trouble is the thumb. In this passage the thumb is only slightly extended from the hand, but it is seldom light enough, or strong enough to play these simple notes with velocity. Practising this passage with rather strong accents on the first note of each group, as indicated, will help to lighten the thumb.

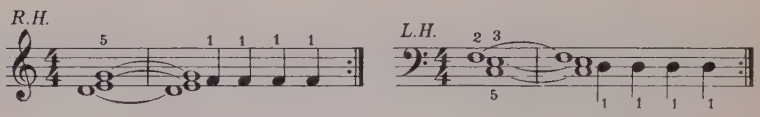
Mendelssohn, *Spinning Song*.



Chapter IV

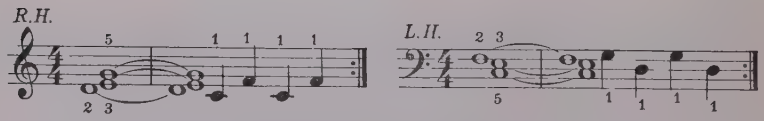
THE THUMB MAKES THE REACH OF A FOURTH UNDER THE HAND

Exercise 11. *To train the thumb to make a longer reach under the hand.*



In order to play the octave scale the thumb must be able to span the interval of a fourth. In this exercise the thumb tip must not be bent inward any more than is necessary to reach the key it must strike, and the elbow must not swing outward to help the thumb. The movement must be confined to the thumb joint. See Fig. 1.

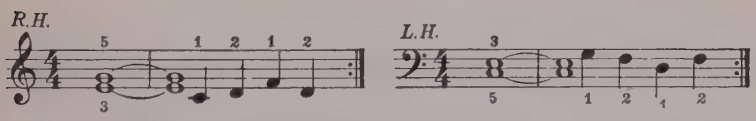
Exercise 12. *The thumb makes the skip of a fourth under the hand.*



The hand must remain quiet. The motion is to be made wholly by the thumb joint.

EXERCISE 13. *To train the thumb to start under the hand the instant the second finger falls onto its key.*

In all instances—in scale passages and arpeggios—when the thumb must reach under the hand to strike its key, it is self-evident that it must travel a longer distance to reach its key than the fingers. In ascending scale passages played by the right hand, and also in descending passages played by the left, the fingers are over the keys which they are expected to strike, while the thumb must pass over the distance of at least a fourth in order to get to its key. For this reason, the thumb must be trained to start at the earliest possible moment.



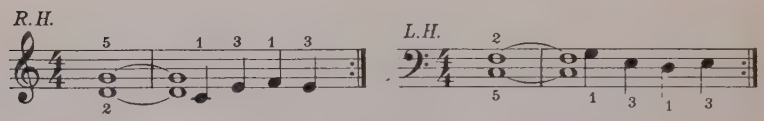
The instant when the second finger falls onto its key is the time for the thumb to begin its trip. It should not be in such a hurry that it jerks the hand, and when it falls onto its key it must fall lightly so that the hand remains quiet.

Note:—After the thumb has learned its lesson of promptness from this exercise, the exercise may be made to serve another purpose. If practised in the following way, the thumb will gain in lightness, and the fingers, in firmness.

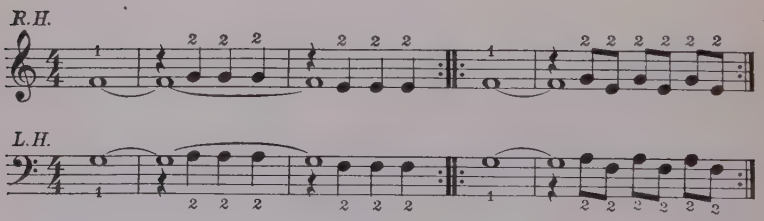
When the thumb strikes *C* lightly, the hand should be allowed to rest on the three notes, *C*, *E* and *G*. (The 3rd and 5th fingers of the right hand hold down the keys, *E* and *G* throughout the exercise.) The 3rd and 5th finger tips should be curved and firm, and there should be a distinct feeling that the arm is resting on these keys, *C*, *E* and *G*.

When the thumb leaves *C*, and the 2nd finger drops onto *D*, the arm should feel balanced on *D*, *E* and *G*. When the 2nd finger leaves *D*, and the thumb falls on F, the arm feels balanced on *F*, *E* and *G*. The left hand takes the exercise in the same way. The exercise must be practised very slowly. The results will be felt at once.

EXERCISE 14. *The same exercise as the preceding, with different fingers. To be practised in the same way.*



EXERCISE 15. *To train the thumb and fingers to retain their flexibility when the fingers reach over the thumb, as in ascending passages for the left hand in playing scales and arpeggios, and in descending passages for the right hand.*



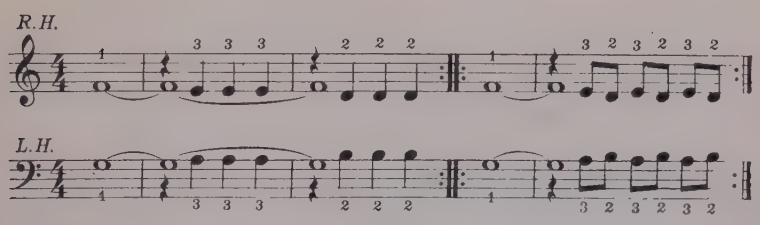
This exercise, like all the other exercises, is to be practised only with separate hands. Here the thumb, resting on its key while the finger reaches over it, must be flexible, or the wrist will stiffen. The right thumb rests on *F*, the 2nd finger drops onto *G*, then, without twisting the hand to a

different angle with the key board, the 2nd finger reaches over the thumb, and makes the same light motion on *E* that it made on *G*. Next, while the thumb still rests on *F* the notes *G* and *E* are struck alternately with the 2nd finger.

The exercise is the same for the left hand.

The point of this exercise is, to have the action of the 2nd finger just as free and light when it reaches over the thumb to strike its key, as it is when it strikes the key beside the thumb. When the finger plays over the thumb in this way, the tendency is to produce the tone by the weight of the hand or arm instead of the finger. This spoils the evenness of the scale or arpeggio.

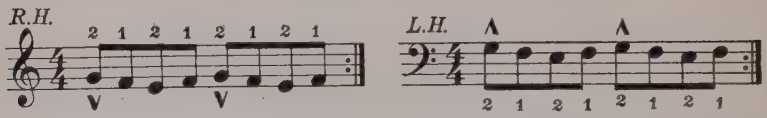
EXERCISE 16. *Light action of fingers,* 3 *and* 2 *playing over the thumb.*



Chapter V

THE THUMB BEGINS TO PLAY WITHOUT A SUPPORTING FINGER

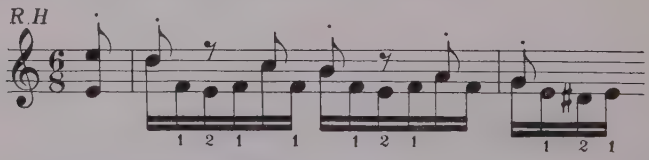
Exercise 17. *For lightness of the thumb action.*



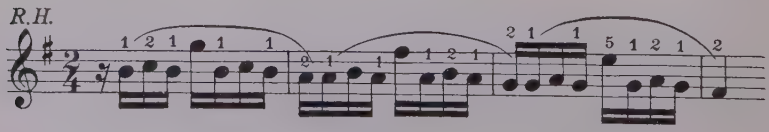
Follow directions given for Ex. 15. Accent the notes indicated; this helps to make the thumb action lighter.

Some Illustrations

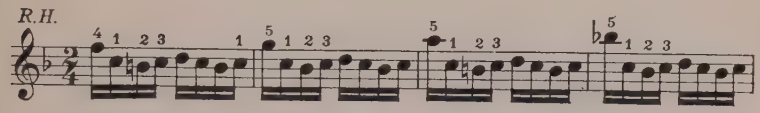
Illustrations of the use of the thumb given in Exercises 15, 16 and 17 may be found in Mendelssohn's *Spinning Song*. Here the thumb and 2nd finger must play lightly. They are meant to suggest the humming sound of a spinning wheel, and serve as an accompaniment to the song.



Another illustration of the light thumb is to be found in *Le Coucou* by Daquin:—



In Czerny, Op. 299, No. 14, similar figures are to be found.

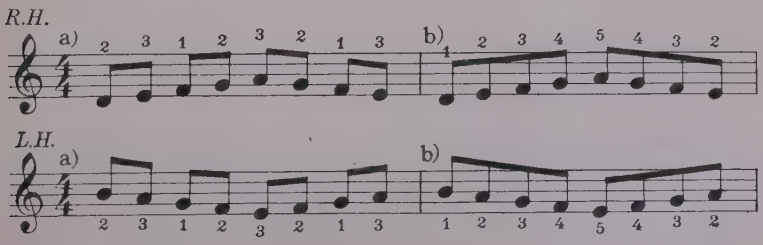


For other examples see Czerny Op. 299, Nos. 16 and 18.

EXERCISE 18. *Introducing the lateral arm movement.*

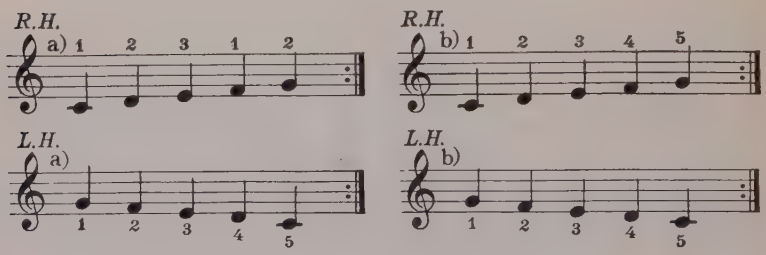
In scale playing, instead of making an imperceptible arm motion with each note, the natural tendency is to make the lateral motion only when the thumb strikes its key. This spasmodic, jerky movement of the arm makes smooth passage playing an impossibility.

In this exercise, which is designed to make the lateral movement even and gradual, when the 3rd finger of the right hand falls on *E*, the arm makes a very slight lateral movement toward the right. With the playing of each note, *F*, *G* and *A* the same motion is made. When the *G* following *A* is struck, the lateral motion is toward the left with each of the notes, *G*, *F*, and *E*. To insure the greatest possible smoothness in the passing of the arm, compare the sound where the arm remains stationary in (b) with (a) where it makes the lateral motion. The left hand follows the same directions as the right.



Note:—It is in playing passages that require this lateral movement that pupils begin to get "stiff arms." There is nothing that makes the playing sound so mechanical and "wooden" as lack of freedom in the lateral movements required in playing the piano. The lateral motion of the arm is as natural to us as the act of breathing, but playing the piano brings in an application of it which requires it to be regulated, and used in a different way than is customary, and furthermore, our consciousness of the key board, and its difficulties take away our natural freedom of motion. A very short lateral movement, such as is made when passing from one key to the next on the key board is much more difficult than a long skip.

EXERCISE 19. *To pass the thumb under the 3rd finger, as required in the C major scale.*



The hand position is the same as in scale playing, (the hand turned slightly inward toward the thumb). The thumb has the position used in the previous thumb exercises. The thumb assisted by a lateral movement of the arm, must reach the distance of a fourth, namely, from *C* to *F* (right hand). The thumb starts under the hand promptly when the 2nd finger falls on its key, as in Ex. 13.

Note:—Pupils with small hands, and short thumbs, generally stiffen the thumb by reaching it too far under the hand when the 2nd finger strikes its key. If the thumb is kept only one key in advance of the playing finger, the hand and thumb will not stiffen. For instance, in this exercise, when the 2nd finger (right hand) strikes *D*, the thumb should quickly take its place over *E*. When the 3rd finger strikes *E*, the thumb should take its place over *F*. It will then be ready to strike its key in time, and, having made the trip gradually, the thumb tip has not been obliged to turn in too much. (The thumb in passing from *C* to *F* is assisted by the lateral movement described in Ex. 18.)

When discussing the distance that the thumb should reach under the hand, Pugno once said "I think the thumb should always be beneath the finger that plays."

Some Hints on Practising Exercise 19

There are three points to be brought out in this exercise, namely—the prompt passing of the thumb under the hand, the smooth lateral movement of the arm, and even, light finger action.

The idea is to have the observance of these points become a habit.

It seems reasonable to assume that this can be accomplished more quickly if the pupil concentrates his attention on only one point at a time.

For instance, he should make several repetitions of the exercise thinking only of the correct passing of the thumb.

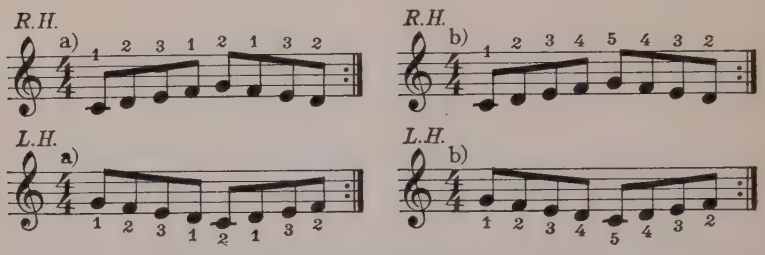
Then he should make as many repetitions thinking only of the lateral movement of the arm. The natural tendency is to keep the arm quiet until two or three notes have been played, and then make a sudden jump to the new position. This tendency must be corrected.

To test the smoothness of the passing of the arm the pupil should occasionally play the exercise with the fingering given in (b) which requires no lateral motion, (a) should sound as smooth as (b).

The third way of practising this exercise is to make several repetitions to observe whether the finger action is light, free and even.

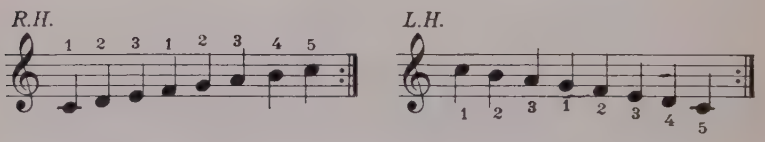
Practising in this way with the attention concentrated on only one detail at a time will bring about an unconscious observance of all the required details, and produces results far more quickly than the "hit or miss" system often used by students.

EXERCISE 20. *For smooth passing of the thumb and even lateral movement of the arm.*

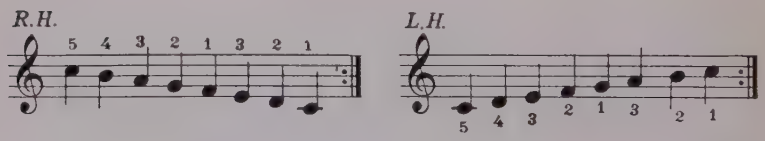


To be practised in the same way as the preceding exercise.

EXERCISE 21. *An octave scale to be practised as Ex.* 19.



EXERCISE 22. *Octave scale, right hand descending, left hand ascending.*



Here the fingers pass over the thumb as in Ex. 15 and Ex. 16. The hand should be slightly tipped toward the thumb, as the movement is in that direction. The lateral arm movement should be practised as in Ex. 19. The fingers must move lightly and freely.

The pupil should be taught how to write all the scales, that they may be in his brain as well as in his fingers. He

should at this stage of his work practise the octave scale first with separate hands, then with both hands in contrary, then in parallel motion.

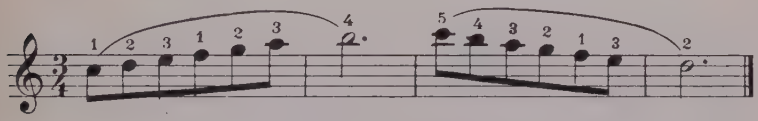
Etudes and pieces should now be selected which furnish examples of the octave scale. Until the passing of the thumb under the 3rd finger has become easy for him, he should not try the more difficult reach under the 4th finger. With very small hands this longer reach should not be attempted.

Some Illustrations of Easy Scale Passages

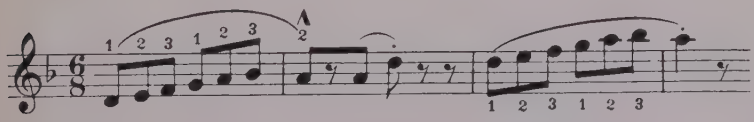
It is difficult to find compositions where the thumb passages are suited to the ability of the average child with a very small hand.

Simple scale passages are to be found in the following pieces:—

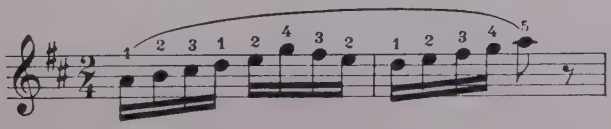
Denneé, *Petite Valse.*



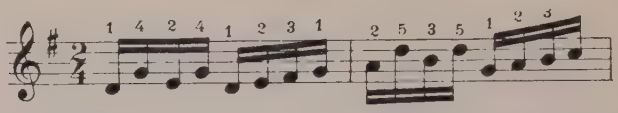
Krentzlin, *In Sunny Spain.*



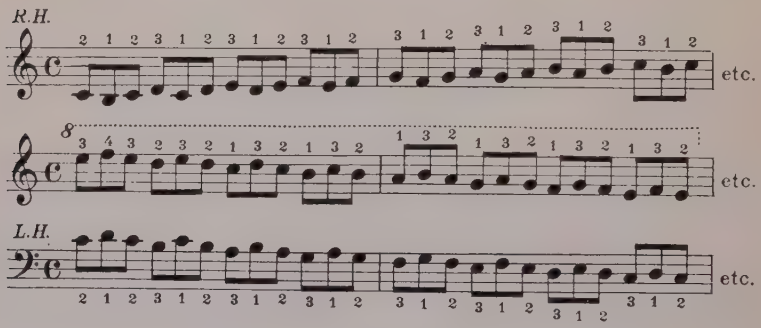
Carl Heins, *Music Box.*



For more advanced pupils Heller's *Prelude No.* 3, Opus 81 is valuable:—



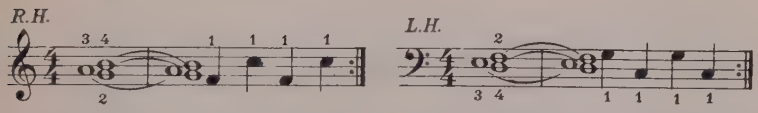
An exercise often used to develop lightness of the thumb is to be found in Gurlitt, Opus 144, No. 19.



Chapter VI

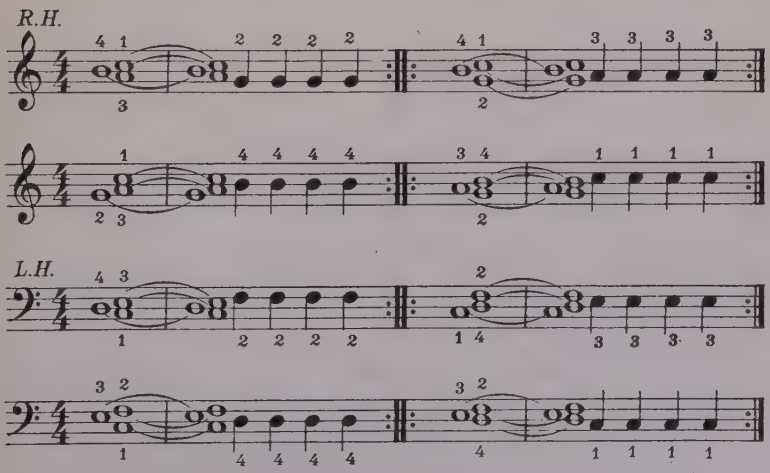
THE THUMB MAKES THE REACH OF A FIFTH UNDER THE HAND

Exercise 23. *To stretch the thumb to reach the fifth under the hand.*



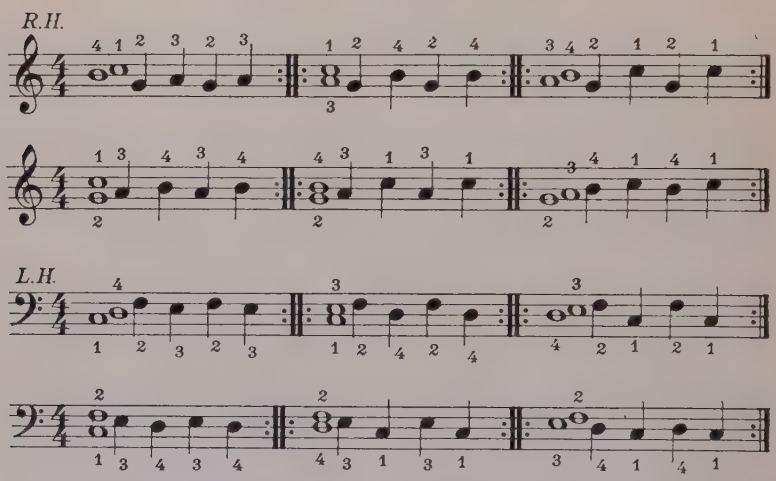
The longer reach required of the thumb in this exercise makes it more difficult to keep the thumb action light and free. Three supporting fingers are used to keep the hand quiet. The exercise should not be practised long at a time.

Exercise 24. *Light finger action with the thumb resting under the hand; also light thumb action under the hand.*



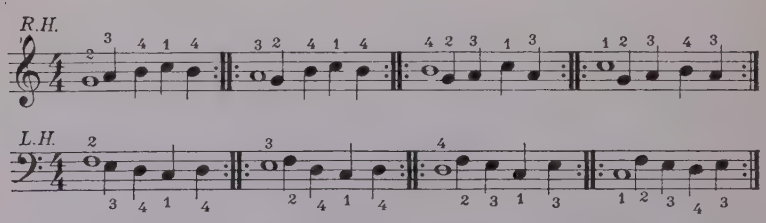
Whenever the fourth finger must play over the thumb, an effort must be made to have the action of the fourth finger free.

EXERCISE 25. *Two fingers to play over thumb with a legato touch. Also legato touch with thumb and finger.*



Follow directions given in the note which is at the end of Ex. 13.

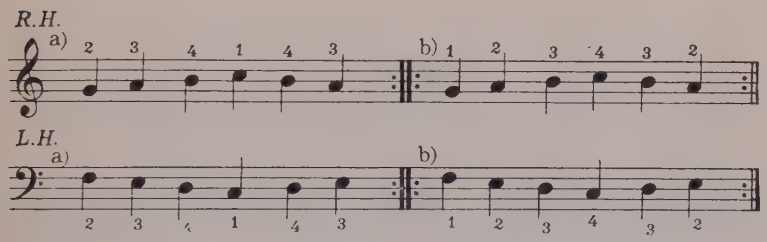
EXERCISE 26. *Passing of the thumb under the third and fourth finger.*



As there is only one supporting finger, an effort must be made to keep the hands quiet. If the finger tips are firm,

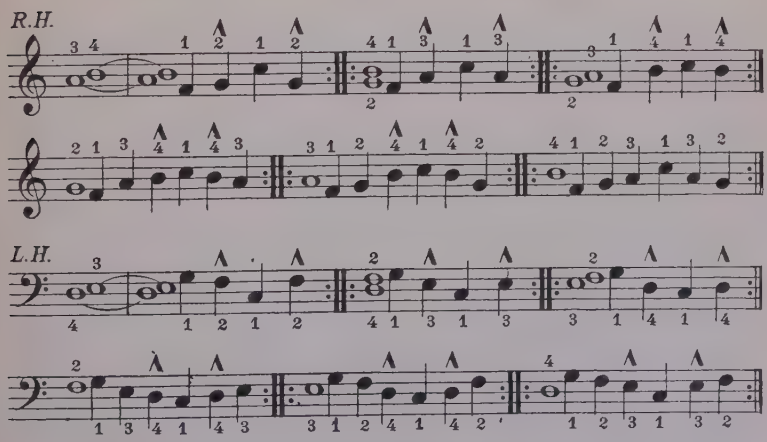
and the arm relaxed, it will be less difficult to maintain a quiet position. For firmness see directions given in note following Ex. 13.

EXERCISE 27. *For correct passing of the thumb, smooth, even lateral movement of the arm, and light finger action.*



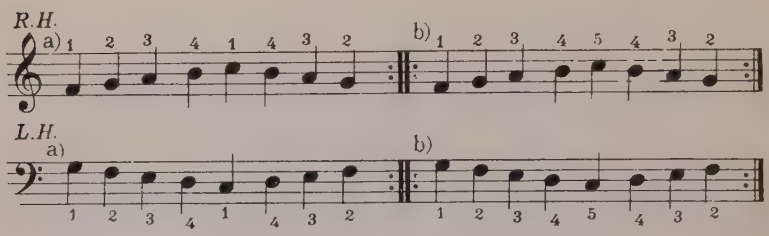
Make fingering (a) sound as smooth as fingering (b).

EXERCISE 28. *Prompt passing of the thumb under the hand, reaching a fifth. Firmness of finger tips.*



Practise in the same way as Ex. 13. The accents help to prevent the thumb from being heavy.

EXERCISE 29. *To pass the thumb under the fourth finger as required in the C major scale.*

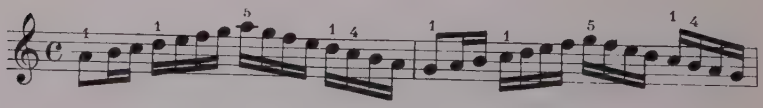


To be practised in the same way as Ex. 19.

These exercises may be followed by the Hanon *Studies,* Nos. 32 to 36 inclusive.

Technic is always more interesting if studied in connection with compositions which illustrate the points involved. Such examples not only prove to the pupil the necessity of the exercise, but also enable him to develop a more musical technic.

The first movement of the Mozart *Sonata No.* 15 has inspired many a pupil to practise scales until they are smooth and even:—



The following studies are excellent for the two octave scale:—Czerny, Op. 748, Nos. 1, 3, 19 and 25. More difficult, Czerny, Op. 299, Nos. 1, 2, 25, 26 and 29.

Chapter VII

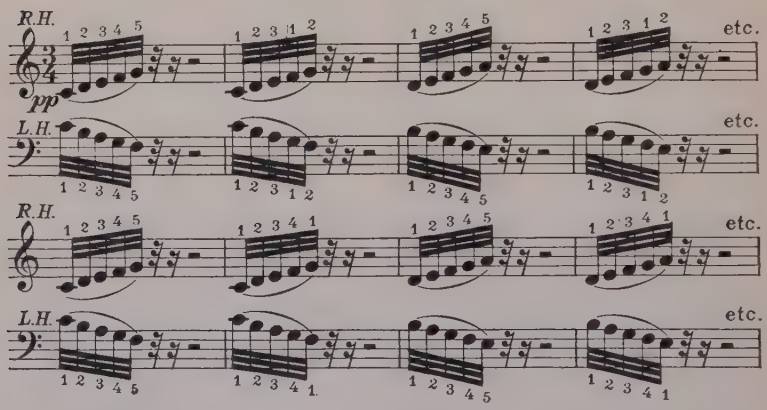
LIGHT VELOCITY

Exercise 30. *Relaxing the hand to make the thumb action light.*

The hand is relaxed in this exercise by holding the wrist high over the key board, with the hand hanging from the wrist

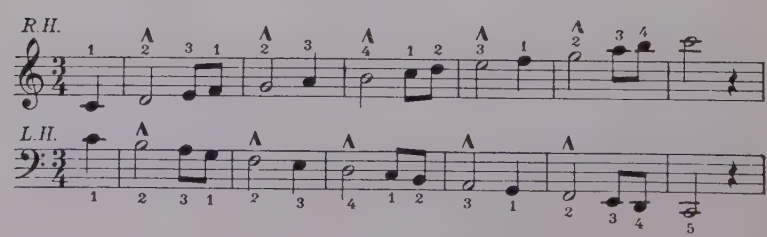
FIGURE 3

(see Fig. 3). The hand should be swung from side to side three or four times, so that it feels quite limp, then the five notes should be played as if by one impulse. There should be the idea of letting the fingers go "of themselves," as if the notes were spilled from the hand. The individual keys are not struck by a separate impulse.



Note:—It is much easier to keep the relaxation in the thumb and hand, if the hand is swung directly over the keys that are to be played. This should be done during the rests. All the notes should be as light as grace notes, and there should be no perceptible difference in the feeling of the hand and thumb when the thumb passes under the hand, (as in measures 2 and 4) than when the figures are used consecutively to sound the notes, as in measures 1 and 3.

EXERCISE 31. *To develop light, unconscious passing of the thumb under the hand.*



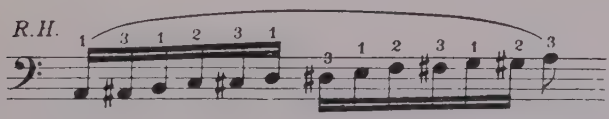
The half-notes are to be accented, and regarded as resting points for the relaxed arm. The eighth-notes should be played with a very light touch.

Examples of Chromatic Passages

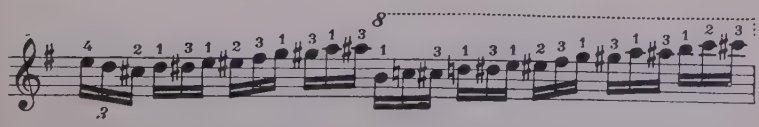
Because of the frequent recurrence of the thumb in chromatic scales, they are very useful in the development of light velocity. The wrist should be held a little higher than for the diatonic scale. This makes the thumb strike more with the tip. The thumb should be near enough to the edge of the black keys to give the hand a position resembling the usual hand position on the white keys. This enables the arm to pass along in a straight line from left to right, without going zigzag back and forth.

Nos. 17 and 18 of the *Little Hanon* by Robert J. Ring give excellent exercises with chromatic fingerings. (Easy.)

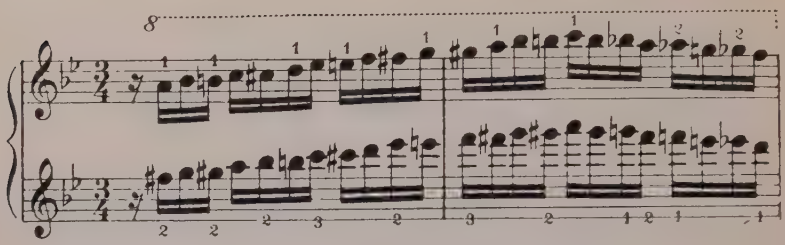
A simple example of the chromatic scale is found in *Ghost in the Chimney* by Kullak.



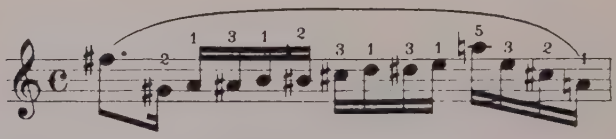
Czerny, Op. 748, No. 12 furnishes the following:



Czerny, Op. 299, No. 31 is excellent for chromatic scale practise.

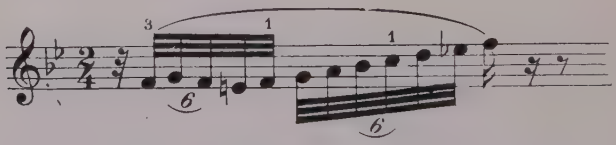


Grieg, *Butterfly*.

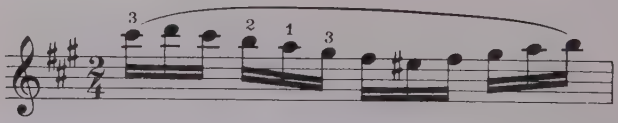


Examples of Light Thumb Passages

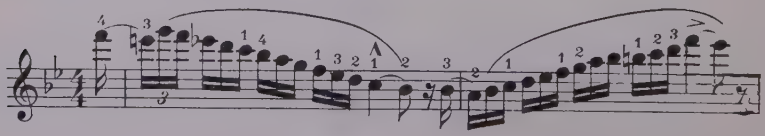
Czerny, Op. 740, No. 13.



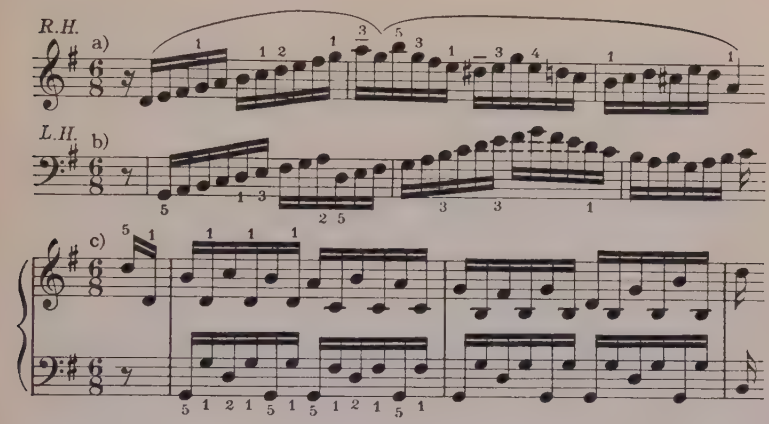
MacDowell, *Shadow Dance*.



Schubert, *Impromptu, Op.* 90, *No.* 3.

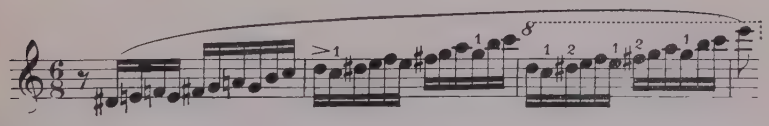


Beethoven, *Variations in G major.*

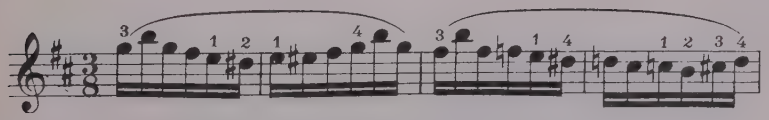


Beethoven, *Minuet from Sonata, Op.* 49, *No.* 2.

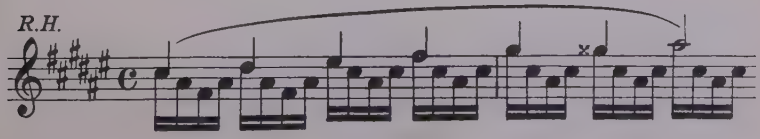
Mendelssohn, *Spinning Song.*



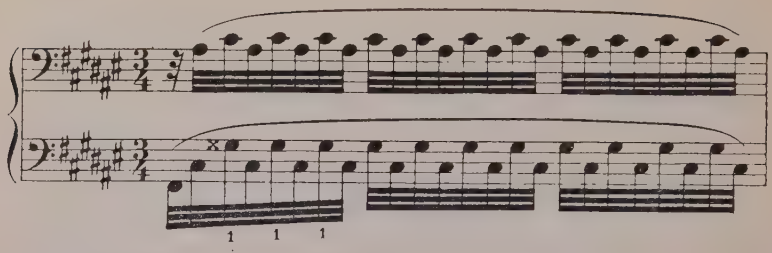
MacDowell, *Witches' Dance.*



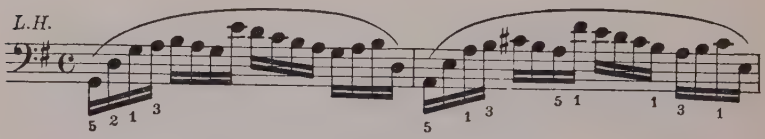
MacDowell, *Concert Etude.*



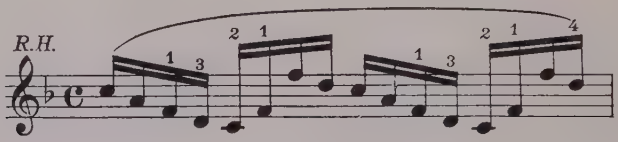
Debussy, *Goldfish.*



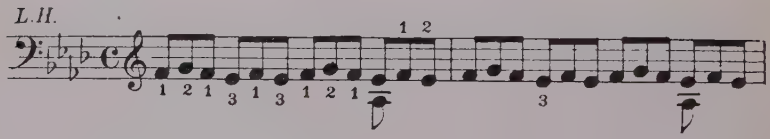
Chopin, *Prelude, Op.* 28, *No.* 3.



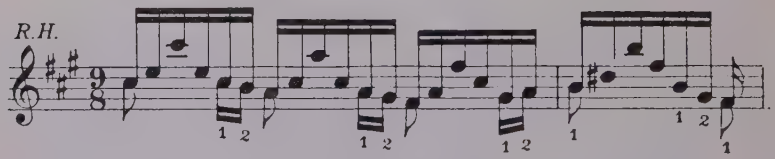
Chopin, *Prelude, Op.* 28, *No.* 23.



Liszt, *Eglogue.*



Liszt, *Dance of the Gnomes.*

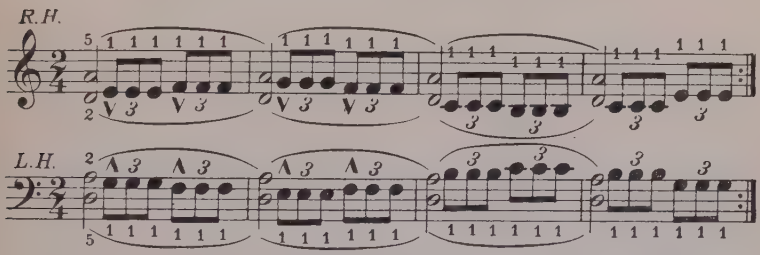


Further examples of light thumb passages are to be found in Paderewski's *Caprice a la Scarlatti,* and in *Papillons* and *Fanitul* by Ole Olsen.

Chapter VIII

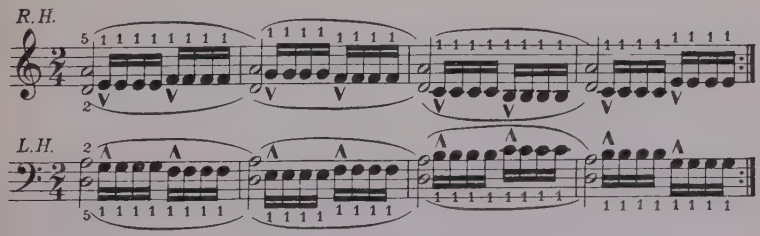
LIGHTNESS AND ENDURANCE OF THE THUMB

Exercise 32. *To give elasticity and strength.*



The first note of each triplet should receive a slight accent, and the 2nd and 3rd notes of the triplets should be played very lightly as if they were a rebound from the accented note.

Exercise 33.

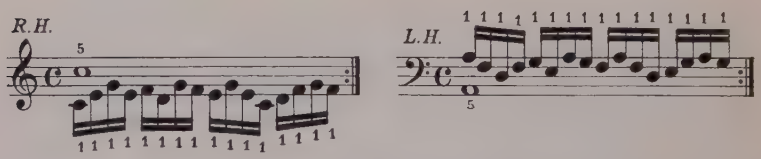


To be practised in the same way as Ex. 32, accenting the first note of each group of four notes, and softening the 2nd 3rd and 4th notes of the group.

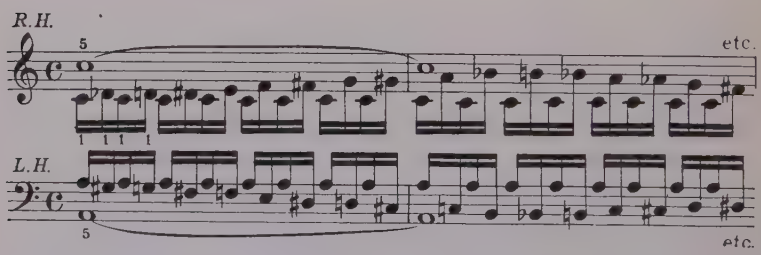
EXERCISE 34. *To help prepare the thumb for octave playing.* (From the *Octave School* by Theodore Kullak.)

The ability to play octaves well depends, to some extent, on the surety, skill and strength of the thumb. This exercise is to be practised in three ways, namely:—

1. Staccato, without any supporting finger; upward and downward stroke from the wrist, the hand to be held extended as if to reach an octave.
2. Staccato, with supporting finger, sideward stroke.
3. Legato with supporting finger.



EXERCISE 35. *To develop the accuracy and skill of the thumb for octave playing.* (From the *Octave School* by Theodore Kullak.)

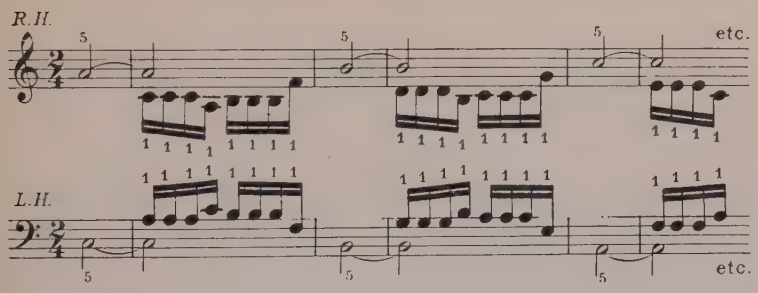


To be practised in the three ways indicated in Ex. 34. On the white keys the thumb is turned slightly inward, while on the black keys it is turned outward to cross the keys.

EXERCISE 36. *For lightness, rapidity and endurance.*

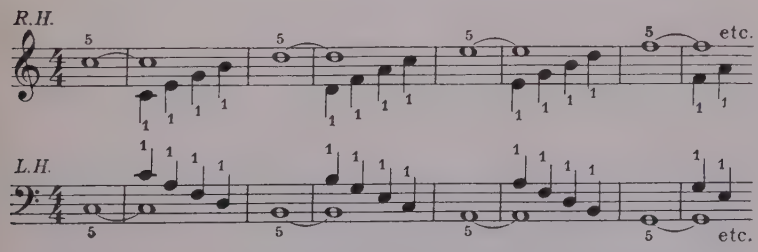
The strength of the thumb must be gradually built up

so that it can play the most taxing passages without fatigue.



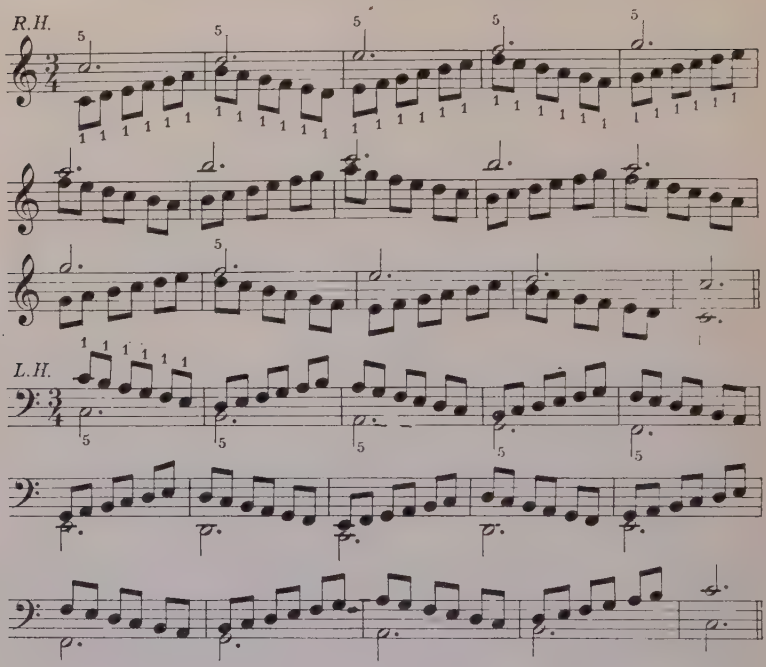
In the measures where a half-note is held by the 5th finger there should be a distinct feeling that the arm is resting. There should be a slight accent on the first sixteenth-note of each group of sixteenth-notes, and the three remaining notes of the group should be very lightly played as if they were a rebound from the accented note. The entire exercise should be played with a light touch, and with separate hands.

EXERCISE 37. *To develop the accuracy of the thumb.*



Have the arm relaxed when it rests on the supporting finger. Keep the thumb turned slightly inward. Play with separate hands.

EXERCISE 38. *For elasticity and endurance.*



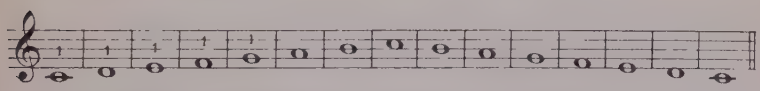
In all the endurance exercises the number of repetitions should be gradually increased, as the thumb gains in strength.

Chapter IX

ARM WEIGHT ON THE THUMB

When a very large, resonant tone is required in the playing of melodies, the weight of the arm is generally used. If the thumb is employed to produce the melody tones with the arm weight the same principle is involved as when the fingers are employed; but the position of the thumb, on the outside of the hand, makes its use in arm weight melody playing somewhat more difficult at first.

Exercise 39. *To prepare the thumb for melody playing with arm weight.*



Allow the hand to hang limp from the wrist, suspended over the keys, with the thumb pointing downward. (See Fig. 3.) Let the arm fall by its own weight in such a way that the tip of the thumb comes in contact with the key, and produces the tone by the weight of the arm. When the arm falls, the hand and wrist sink immediately to normal position. Play the exercise slowly with separate hands.

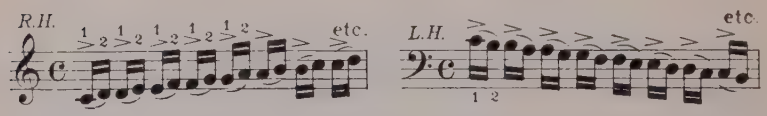
Practise the *D♭ major* scale next in the same way. Here, when the thumb comes in contact with the black key, it crosses it, falling on its side instead of on the tip.

Note:—Practising this exercise with the arm high above the keys is merely for the purpose of establishing the feeling of the weight of the arm on the thumb. As soon as this is realized the exercise should be done with very little arm

motion. The hand should be hanging from the wrist as before, with the thumb in the same perpendicular position, its tip in contact with the key. The motion consists of the sinking of the arm, wrist and hand to the normal position.

After the pupil has learned to produce tones in this way it is not difficult for him to learn to shade them; his ear helps him to do this.

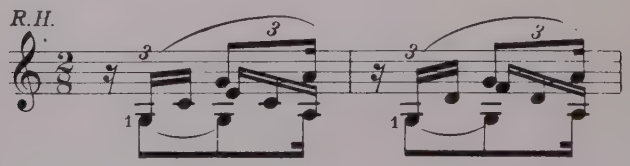
EXERCISE 40. *This is an excellent exercise for practising arm weight with the thumb, although it was not written for that purpose. It is No.* 45, *Hanon.*



Here the accented notes are played with arm weight.

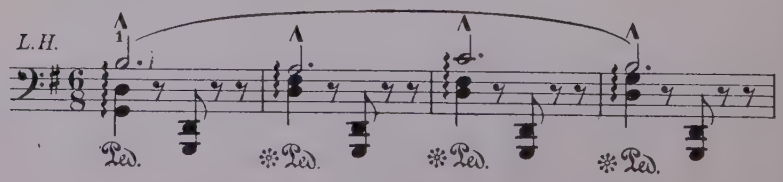
SOME EXAMPLES OF MELODY PLAYING BY THE THUMB MAKING USE OF ARM WEIGHT

Chopin, *Prelude, Op.* 28, *No.* 1.



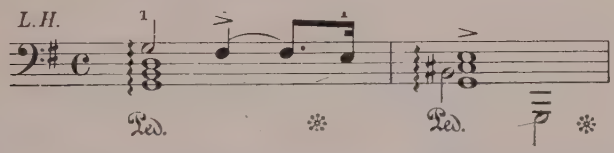
The first note of each measure is to be played with the thumb using arm weight.

Rubinstein, *Barcarolle in G minor.*



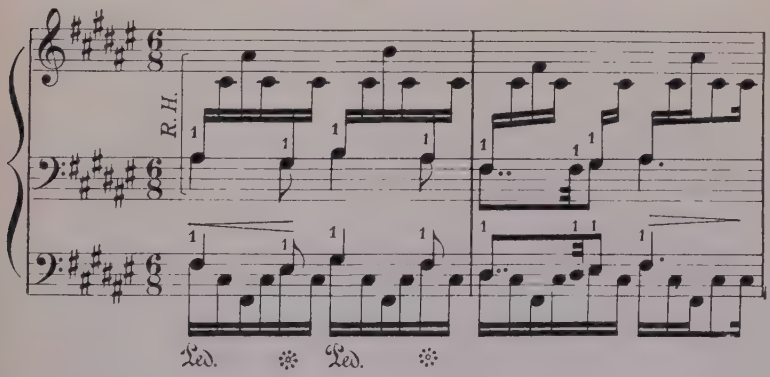
In the *G major* section of this Barcarolle there is a melody played by the thumb of the left hand with the weight of the arm.

Leschetizky, *Etude Héroique.*

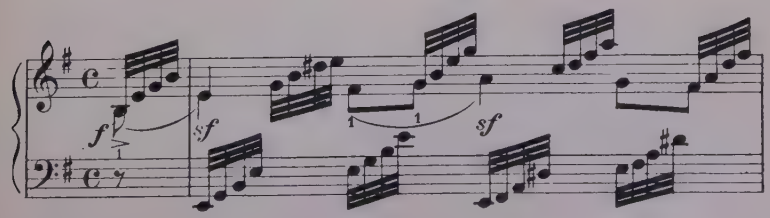


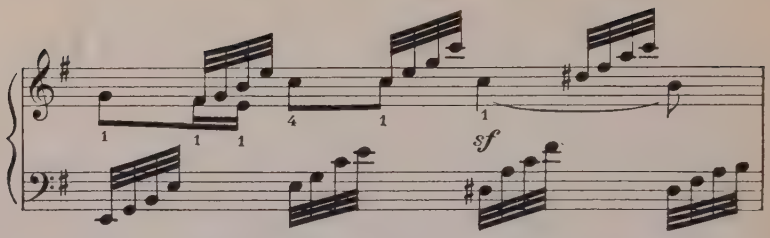
Another instance of an arm weight melody played by the left thumb.

Schumann, *Romanze in F sharp major.*



Mendelssohn, *Prelude in E minor,* Op. 35, No. 1.





The Grieg *Ballade,* (3rd Variation) furnishes another instance of a melody played by using the weight of the arm on the thumb.

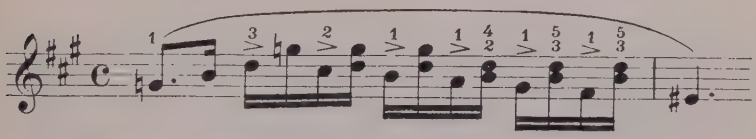
Chapter X

AN EXCEPTIONAL USE OF THE THUMB

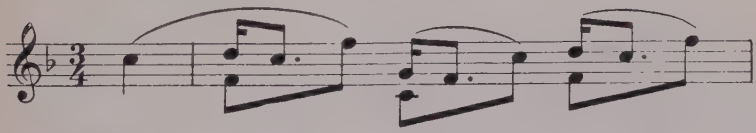
An exceptional use of the thumb where there is no thumb action, the thumb being used as part of the hand, is to be found in many compositions.

The hand in such cases is moved by a rotary motion of the fore arm.

Such passages are found in the Grieg, *Butterfly*.



also in Chopin, *Etude, Op.* 25, *No.* 3.



In such cases there is none of the usual thought of a thumb joint. On the contrary, the thumb is held slightly extended from the outside of the hand without making any motion of its own, while the tone is produced by a rotary motion of the forearm. The wrist is held somewhat higher than its normal position, in order to give it the utmost freedom, and must be absolutely relaxed.

The accents fall on the thumb, and are produced by the weight of the hand and forearm. The unaccented notes should be played lightly. If one rotates the hand and arm freely, there will be no stiffness in the wrist or hardness in the tone.

Chapter XI

PREPARATION OF THE THUMB FOR ARPEGGIO PLAYING

In the playing of arpeggios, the thumb must reach farther under the hand, and must also be extended farther outside of the hand than in scale playing.

Exercise 41. *To increase the span of the thumb.*

Fold the fingers under the hand, as in Ex. 3. The fingers of the right hand first on *D*, *E*, *F* and *G*. Strike *A* several times with the thumb. The feeling in the thumb should gradually become as relaxed as when it strikes *C*, which is close beside the hand.

Strike *A* and *C* alternately with the thumb.

Next play *A* and *B*, one after the other with the thumb, then play *A*, *B*, *C*, *B* slowly with the thumb.

If the size of the hand will allow it, then make the thumb reach as far as *G*. Play *G*, *A*, *B* and *C* back and forth with the thumb.

Then play the following skips with the thumb: *G*, *B*, *A*, *C*, *B*, *G*.

These exercises should not be played long at a time. Great care should be taken to rest one hand by changing to the other one before the thumb becomes too tired. If the thumb feels rested after a pause of three minutes, the exercise has not been done too long.

The left hand, in this exercise has the fingers, 2, 3, 4 and 5 resting (curled under the hand) on *F*, *E*, *D* and *C*.

The thumb strikes *B*, then *B* followed by *G*.

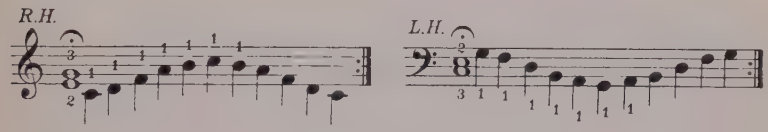
Next it plays *B*, *A*, *G*, *A* back and forth.

If the hand is large enough, the following exercise may be taken:—

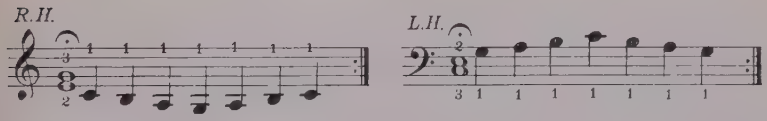
With the hand resting in the same position, have the thumb strike *C*.

Play *C*, *B*, *A* and *G* back and forth with the thumb, then have it play the skips, *C*, *A*, *B*, *G*, *A*, *C*.

EXERCISE 42. *To stretch the thumb reach under the hand.*

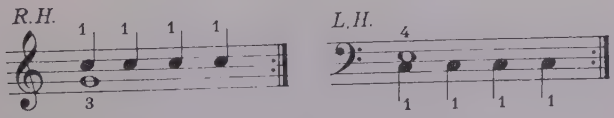


EXERCISE 43. *To stretch the thumb reach extended from the hand.*



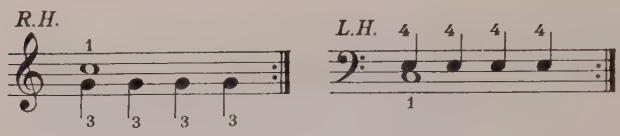
Note:—It is not to be expected that children with small hands can take any of these exercises. For their use, Ex. 19 in *Little Hanon* by Robert J. Ring is excellent.

EXERCISE 44. *Light thumb action under the hand.*



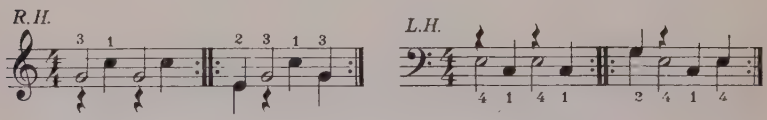
See Ex. 6.

EXERCISE 45. *Free action of the 3rd and 4th fingers reaching over the thumb.*



See Ex. 15.

EXERCISE 46. *Legato Exercise.*

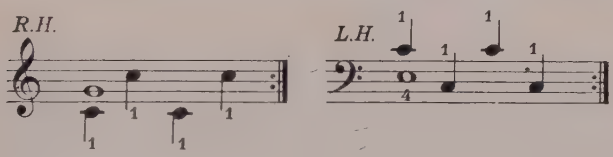


The half notes must be held for their full time.

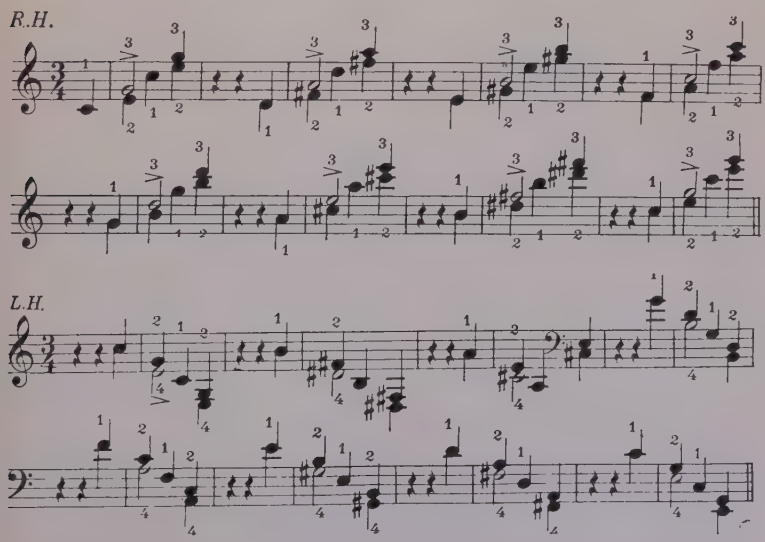
Chapter XII

THUMB STRETCH IN ARPEGGIO PLAYING

Exercise 47. *The long thumb stretch used in the arpeggio.*



Exercise 48. *To connect intervals of varying lengths by means of a steady, even arm movement, and by a legato touch.*

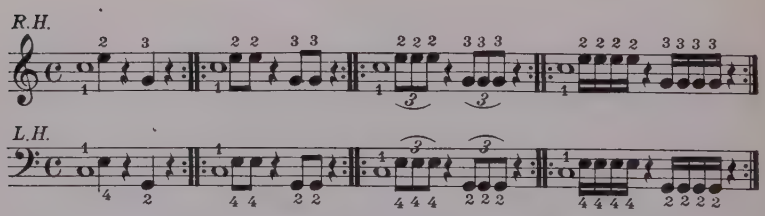


In arpeggio playing the passing of the thumb is greatly aided by the lateral movement of the arm, which is more difficult here than in the playing of scales, because the intervals are not of uniform size. Here we find the same tendency that is noticeable in scale playing, the student keeps his arm stationary until the passing of the thumb makes it necessary for the arm to be in another position, then he makes a sudden jump, which destroys all possibility of smooth, even passage work.

In the above exercise the hand position is similar to that used in scale playing. The half notes must be held for their full time in order to help the connecting of the intervals which make legato playing difficult.

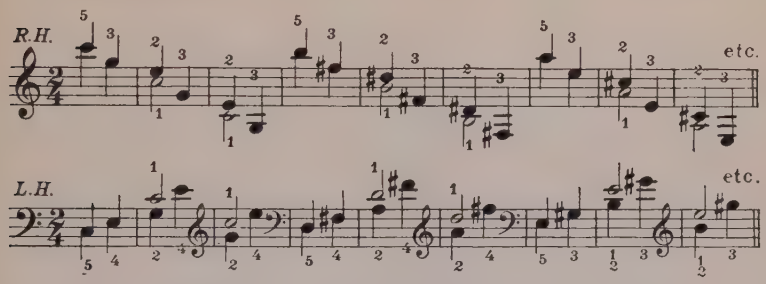
This exercise will in a very short time greatly improve the legato of the arpeggio which is considered its chief difficulty.

EXERCISE 49. *Light finger action when the hand reaches over the thumb.*



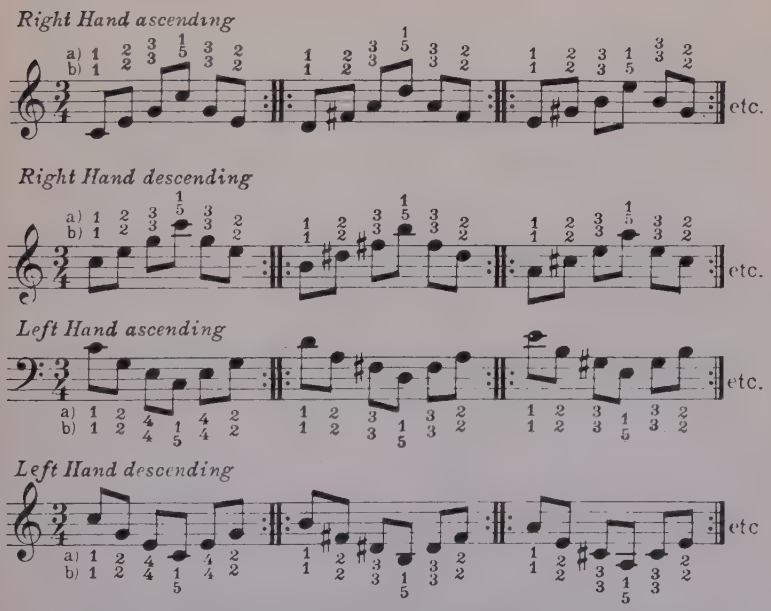
While the thumb is resting on *C*, the 2nd finger drops on to *E* (right hand) then, without twisting the hand so that it makes a different angle with the key board, the 3rd finger reaches over the thumb, with a slight wrist motion, and strikes *G*. The finger action must be light. Practise in the same way as Ex. 32.

EXERCISE 50. *For legato touch, and smooth lateral arm movement.*



To be practised the same as Ex. 48.

EXERCISE 51. *Legato exercise in keys of C, D, E, F, G, A, B and C major. Fingering (a) to be made as smooth as fingering (b).*



To be played with very firm finger tips, and even lateral arm movement.

EXERCISE 52. *To develop light, unconscious passing of the thumb in arpeggio passages in the major keys of C, D, E, F, G, A, B and C.*

Right Hand ascending

Right Hand descending

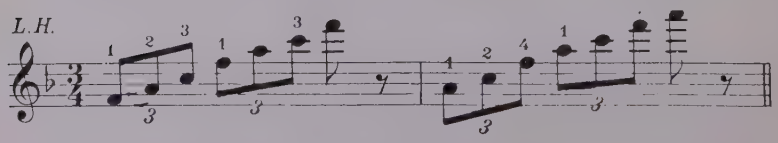
Left Hand ascending

Left Hand descending

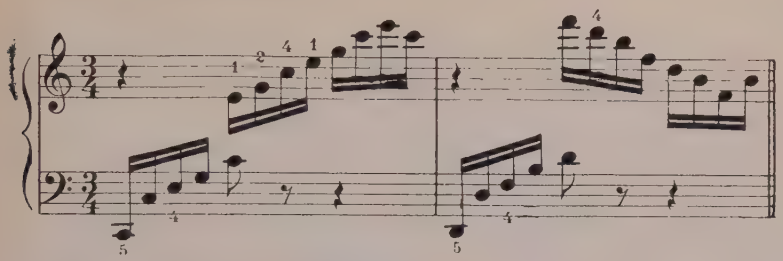
To be practised in the same way as Ex. 30. The important point is the relaxing of the hand between groups.

SOME ARPEGGIO PASSAGES

Easy arpeggios are found in Czerny, Op. 748, No. 21.

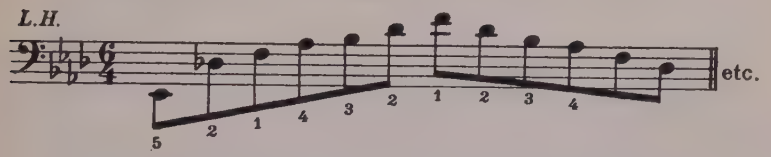


Czerny, Op. 299, No. 30.



also in Gurlitt, Op. 141, No. 14.

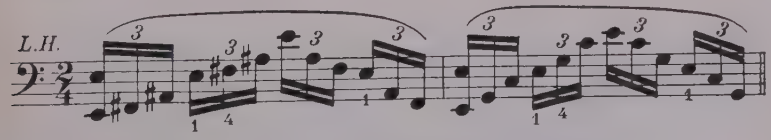
Arpeggio passages frequently form the accompaniment of a composition, as in the Liszt, *Liebestraum No.* 3:—



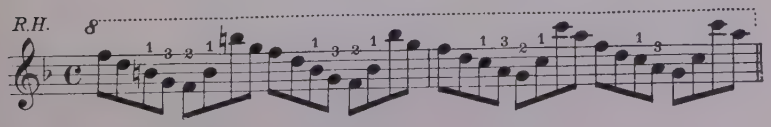
They generally figure in cadenza passages.

Liszt-Alabieff, *Nightingale.*

Sometimes they make up an entire composition as in Palmgren, *The Sea.*



Chopin, *Prelude No.* 23, *is another such instance.*

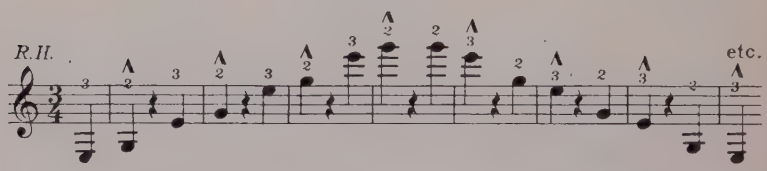


Chapter XIII

LATERAL ARM MOVEMENT

Exercise 53. *Free, even lateral arm movement.* (*Right hand.*)

Thumb under hand. Thumb out.



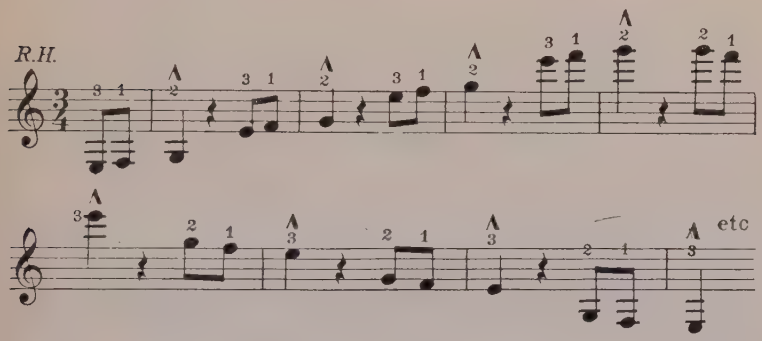
The transition from the note struck by the 3rd finger to the note struck by the 2nd finger is made by the arm moving steadily from left to right, as the passage ascends, and from right to left when descending.

These movements should be made as even as possible, without jerking the hand or arm. The hand should be turned slightly inward, as for scale playing.

In the right hand, as the passage ascends, the thumb is held under the hand, just as in scale playing. When the passage descends, the thumb is outside of the hand.

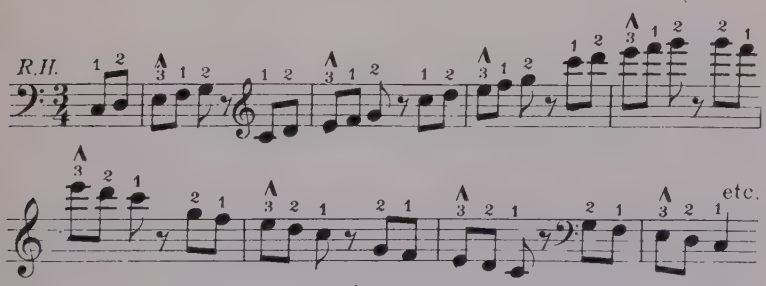
Keep the hand close to the keys, with no movement of the wrist up or down, the tones are to be produced wholly by finger action.

EXERCISE 54. *Lateral arm movement, light thumb action.* (*Right hand.*)



The thumb plays lightly while the hand and arm move steadily from left to right ascending, and right to left descending, as in the last exercise. In ascending, the thumb passes under the hand immediately after the 2nd finger has played.

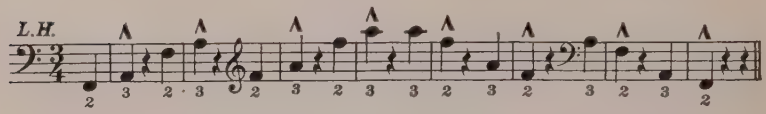
EXERCISE 55. *Lateral arm movement, light thumb and finger action.* (*Right hand.*)



The arm moves steadily as in the last two exercises.

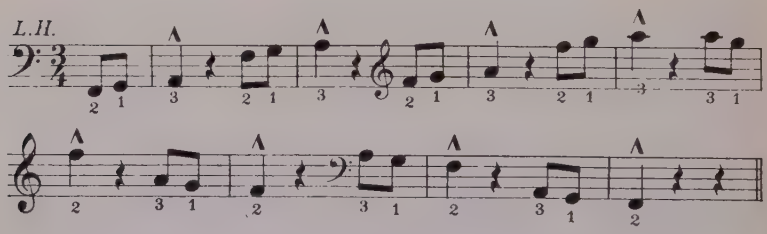
EXERCISE 56. *Free, even lateral arm movement.* (*Left hand.*)

Thumb outside of hand. Thumb under hand.



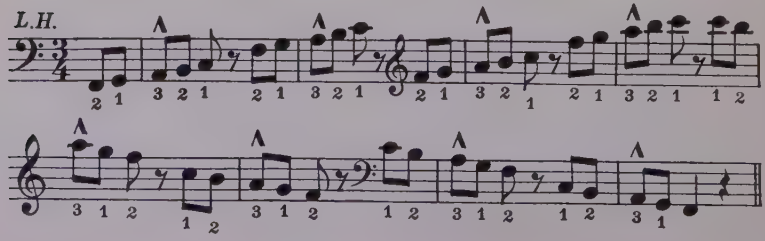
In the left hand, the thumb is outside the hand as the passage ascends, and under the hand as it descends. To be practised the same as Exercise 53.

EXERCISE 57. *Lateral arm movement, light thumb action.* (*Left hand.*)

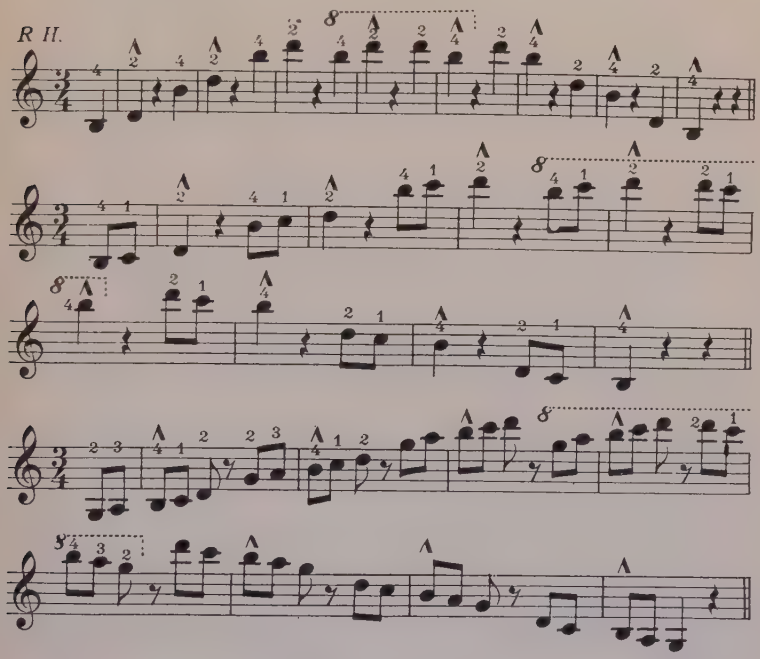


In descending the thumb passes under the hand immediately after the 2nd finger plays.

EXERCISE 58. *Lateral arm movement, light thumb and finger action.* (*Left hand.*)

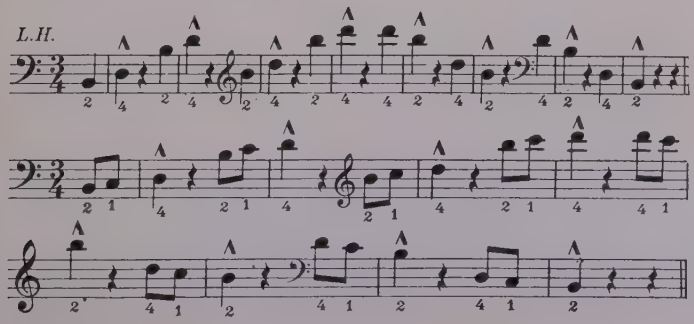


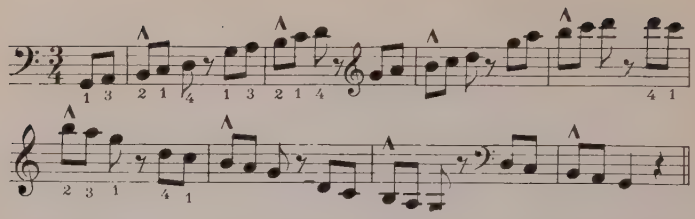
EXERCISE 59. *Lateral motion, thumb passing under the 4th finger.* (*Right hand.*)



To be practised in the same way as Exercises 53, 54 and 55.

EXERCISE 60. *Lateral motion, thumb passing under 4th finger.* (*Left hand.*)

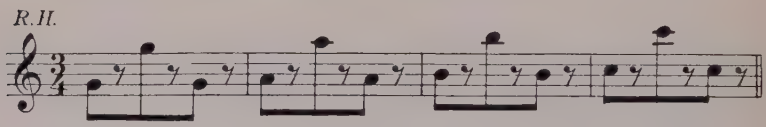




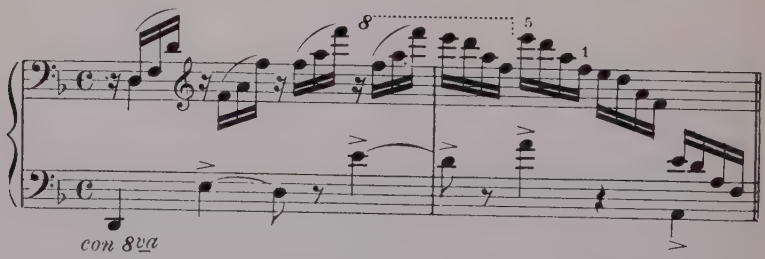
These exercises may be practised in all major and minor keys, and should be followed by scales.

SOME EXAMPLES IN WHICH THE LATERAL MOTION IS USED

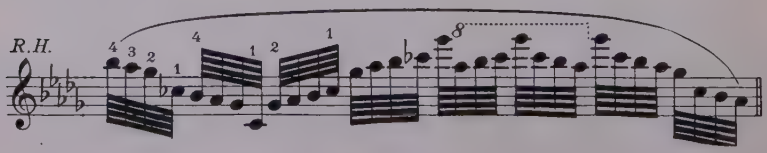
Susan Schmitt, *The Juggler.* (Very easy.)



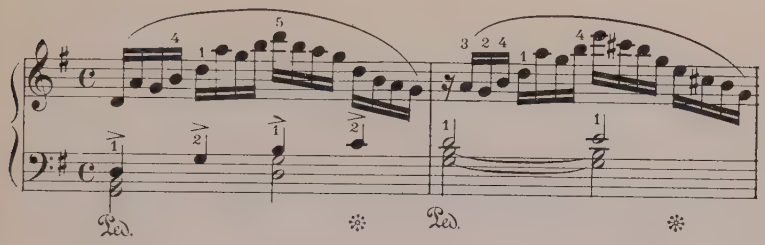
Leschetizky, *Toccata.*



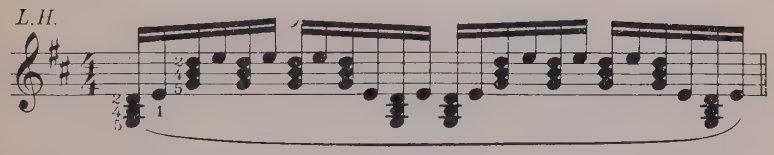
Debussy, *Reflets dans l'eau.*



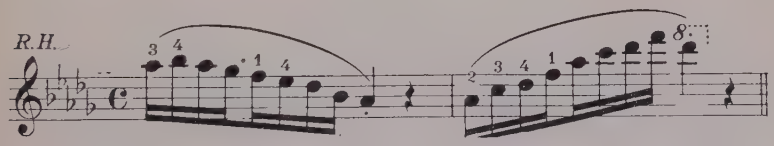
Leschetizky, *Etude Héroique.*



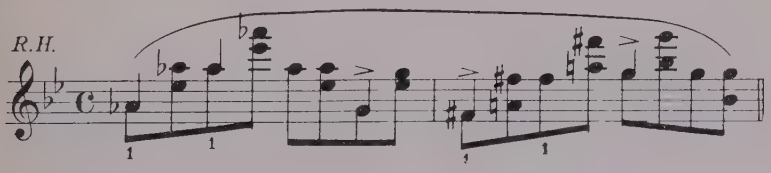
Rhene-Baton, *Fileuses pres de Carantec.*



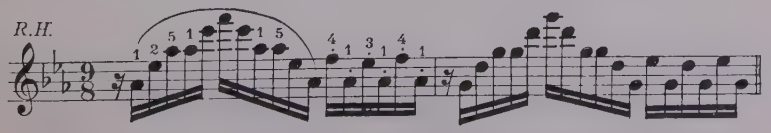
Leschetizky, *Intermezzo Scherzando.*



Chopin, *Ballade,* Op. 23.



Cecil Burleigh, *Snow Birds, Op.* 26, *No.* 3

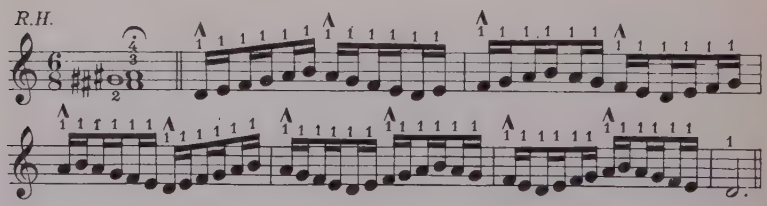


Chapter XIV

MORE DIFFICULT INTERVALS TAKEN UNDER THE HAND, AND EXTENDING FROM THE SIDE OF THE HAND

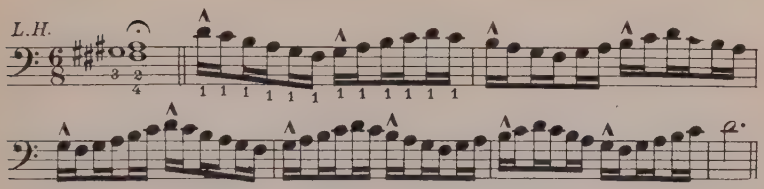
Exercise 61. *Lightness and accuracy of the thumb playing under the hand, and also to develop the endurance of the thumb.* (*Right hand.*)

Throughout this exercise the fingers of the right hand are kept resting on the cluster of three black keys. The 2nd finger on *F*♯, the 3rd on *G*♯, and the 4th on *A*♯, while the thumb plays lightly on the white keys.



Exercise 62. *For lightness and accuracy of the thumb playing under the hand, and also to develop the endurance of the thumb.* (*Left hand.*)

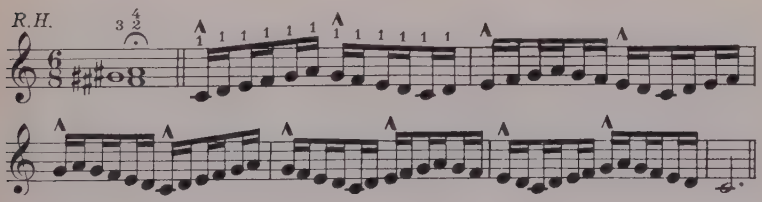
Here the fingers, 2, 3 and 4 are kept resting on the cluster of three black keys, as in Ex. 61. The 4th finger rests on *F*♯, the 3rd on *G*♯, and the 2nd on *A*♯, while the thumb plays lightly on the white keys.



In both Exercises, 61 and 62 the accents should be heavy, and the hand must remain quiet.

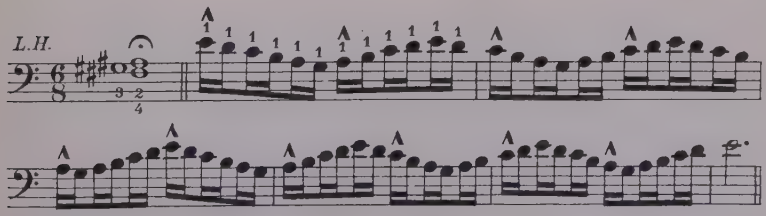
EXERCISE 63. *The same as Exercise* 61, *but requiring the thumb to reach farther from the side of the hand.*

Right hand, the 2nd, 3rd and 4th fingers to rest on *F*♯, *G*♯ and *A*♯ throughout the entire exercise, while the thumb plays on the white keys.



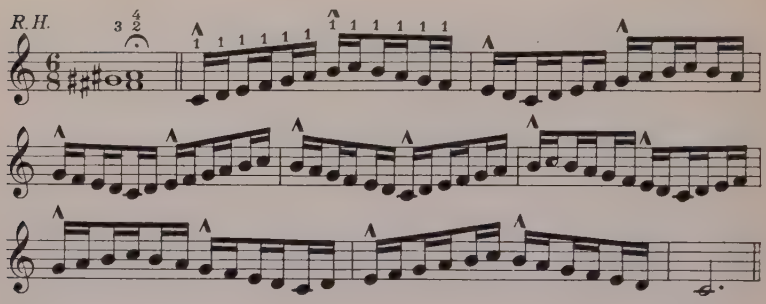
EXERCISE 64. *The same as Exercise* 63 *for the left hand.*

Left hand, the 4th, 3rd and 2nd fingers rest on *F*♯, *G*♯ and *A*♯, while the thumb plays on the white keys.

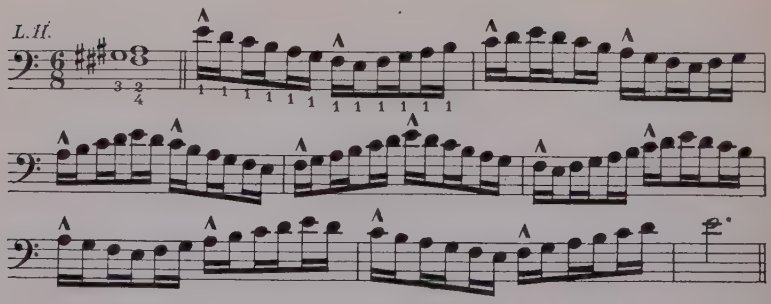


EXERCISE 65. *Like Exercises* 63 *and* 64, *but with the thumb playing farther under the hand.*

Right hand, the same keys held down as above.

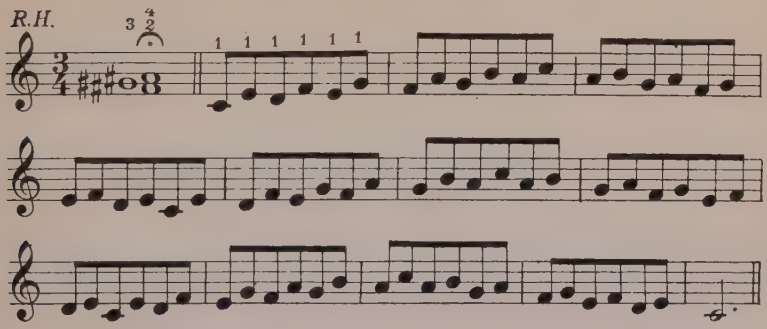


EXERCISE 66. *The same as Exercise* 65, *but for the left hand.*

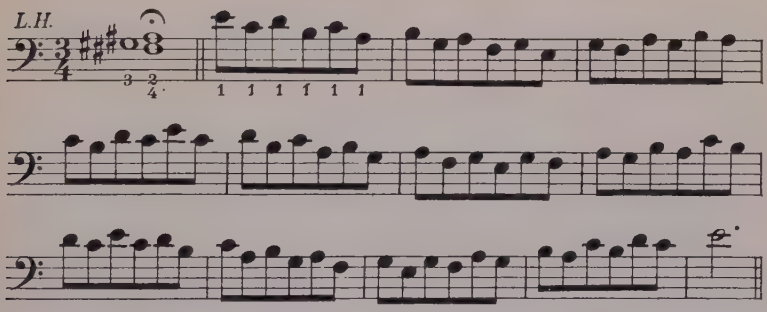


EXERCISE 67. *For greater accuracy of the thumb. Here it must make skips of a third, and also skips of a second.*

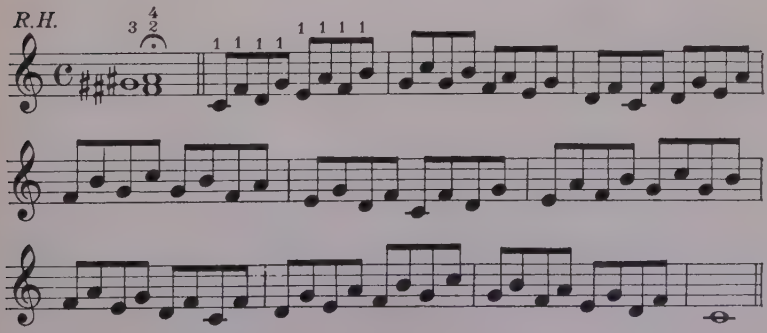
The 2nd, 3rd and 4th fingers of each hand are required to hold down the same cluster of black keys as in the preceding exercises.



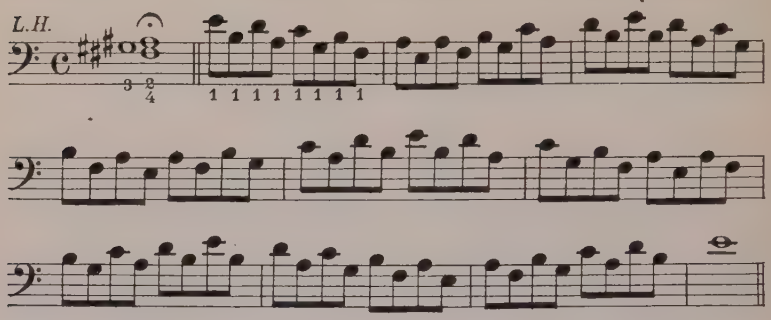
EXERCISE 68. *The same as Exercise 67, but for the left hand.*



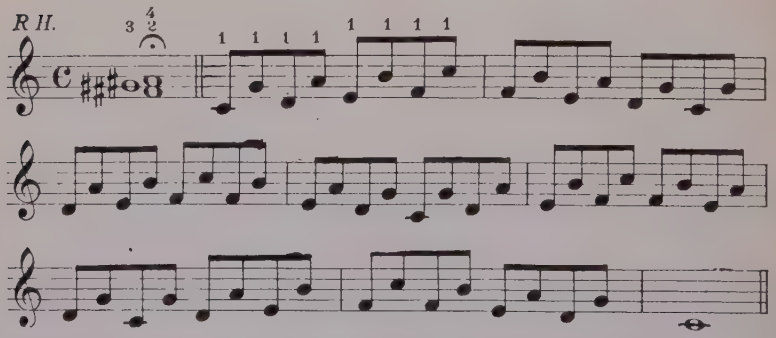
EXERCISE 69. *The thumb makes skips of a fourth, and also of a third.*



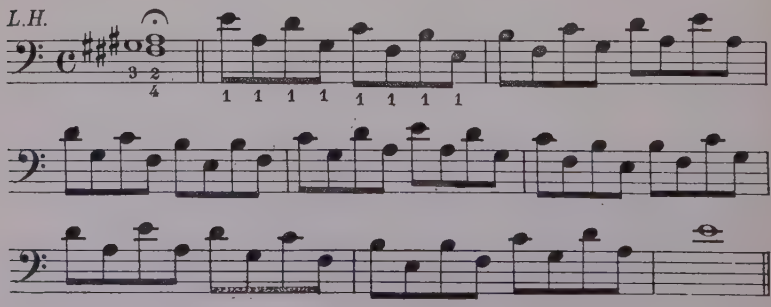
EXERCISE 70. *The same as Exercise 69, but for left hand.*



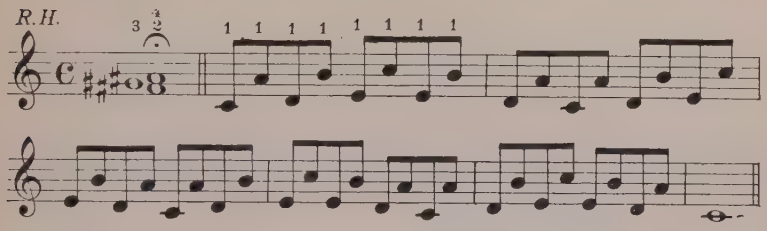
EXERCISE 71. *Intervals of a fifth and fourth played by the thumb on the white keys while the fingers 2, 3, and 4 hold down the cluster of three black keys, as in the previous exercises.*



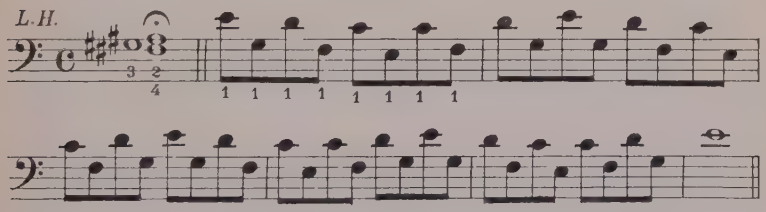
EXERCISE 72. *Same as Exercise 71. For left hand.*



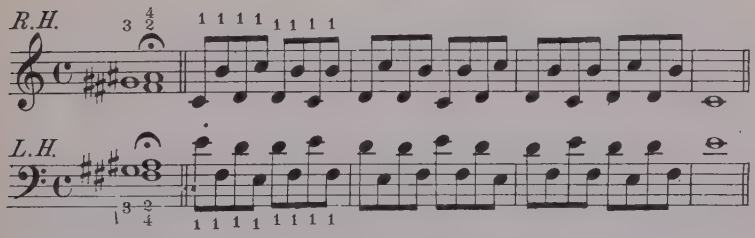
EXERCISE 73. *Intervals of a sixth and a fifth played by the thumb.*



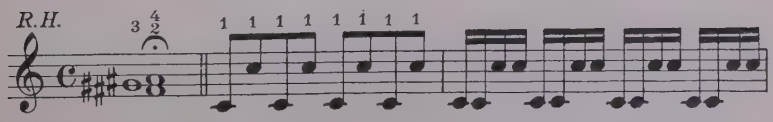
EXERCISE 74. *The same as Exercise 73. For left hand.*

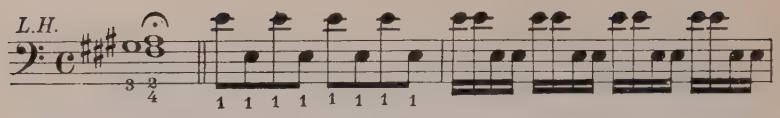


EXERCISE 75. *Intervals of sevenths and sixths played by thumb.*



EXERCISE 76. *The thumb stretches an octave. The same keys held down as before.*



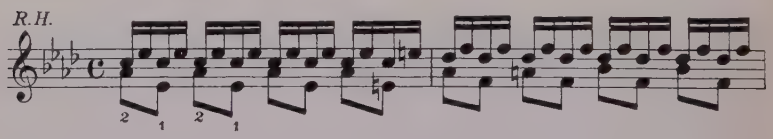


In the groups of sixteenth-notes there should be a slight accent on the first of each group, and the 2nd, 3rd and 4th softened to give the idea that they are a rebound from the accented note. See Ex. 33.

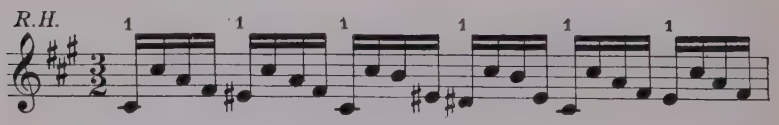
For additional material, see Ex. No. 40 in the Villoing Technical Studies.

Some Examples of Thumb Passages Where the Thumb Plays in a Position Slightly Extended from the Hand

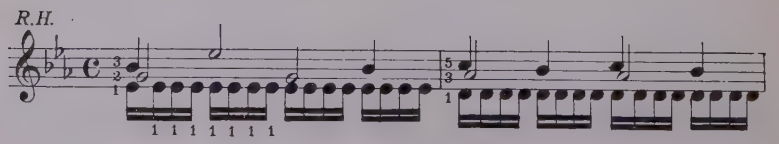
Clementi, *Gradus, No.* 22.



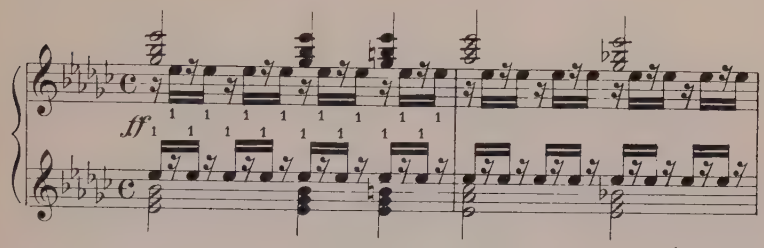
Clementi, *Gradus, No.* 24.



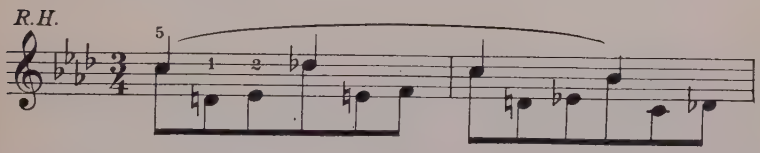
Czerny, *Op.* 365, *No.* 10.



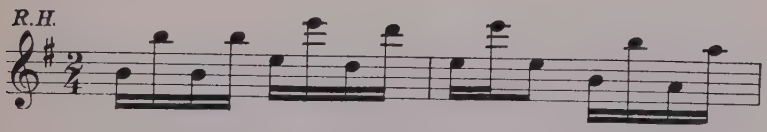
Czerny, *Op.* 365, *No.* 56.



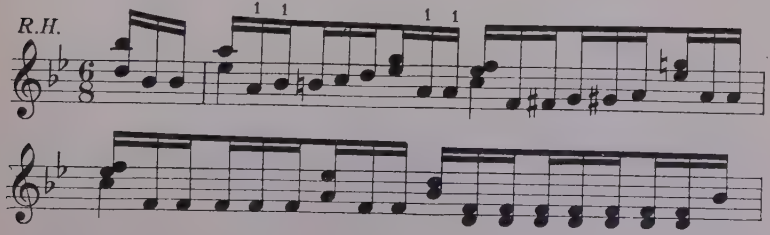
Chopin, *Waltz, Op.* 42.



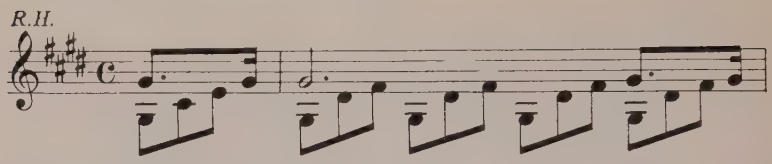
Palmgren, *Dragon Fly.*



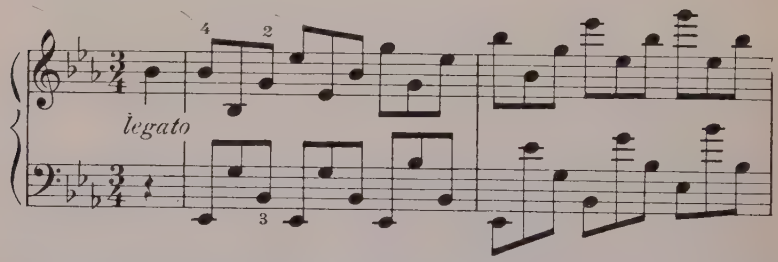
Mozart, *Pastorale Variée.*



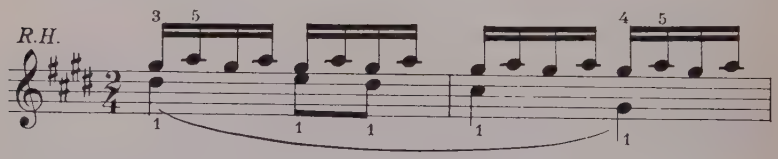
Beethoven, *Sonata, Op.* 27, *No.* 2.



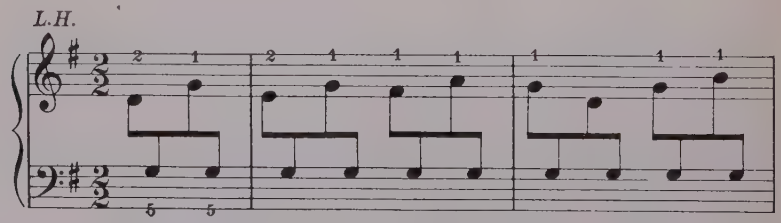
Chopin, *Prelude, No.* 19.



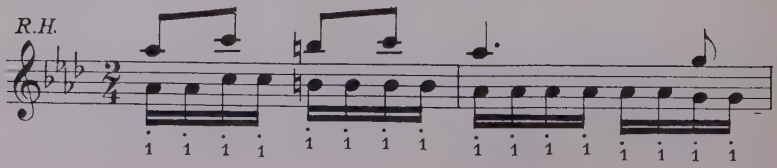
Liszt, *Nightingale.*



Saint-Saëns, *Bourrée for Left Hand.*



Schumann, *Carnaval,* (*Reconnaisance*).



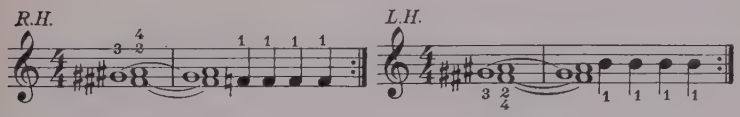
Appendix I

THUMB EXERCISES FOR TINY HANDS

Note of Explanation:—A child with a very small weak hand can hold it in an arched position better, at the very beginning, if required to rest his finger tips on the cluster of three black keys, *F*♯, *G*♯ and *A*♯. This position also enables him to start his thumb work with a shorter reach under the hand than is possible when the position on the white keys is taken.

In the following exercises the finger tips of fingers 2, 3 and 4 should rest on the front edge of the black keys, and should be in a curved position. (It is not necessary for the pupil at this time to know the names of these keys. The printed notes are for the teacher.)

Exercise (a) *Light, free thumb action with quiet hand, thumb playing a key beside the hand.*
(To be played an octave higher.)



While the fingers 2, 3 and 4 rest on the three black keys the arm should be relaxed. Before the thumb begins playing the fingers should rest on their keys for four counts, as indicated by the notes on the staff. The arm must feel re-

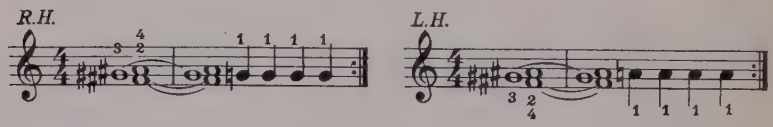
laxed during these four counts, or it will not be relaxed after the thumb begins to play. The thumb of the right hand strikes *F*♮ lightly. The hand should not shake, and the thumb action should feel as free and light as it was in Ex. 1. The tip of the thumb should be slightly turned in, as in that exercise.

When the left hand does the exercise the thumb strikes *B*♮.

Children are unable at first to keep the resting fingers curved. The strength to do this comes gradually from the other technical work. Here the main thought is to have the arm relaxed, and the thumb action light.

EXERCISE (b) *Light thumb action, quiet hand while thumb plays under the hand.*

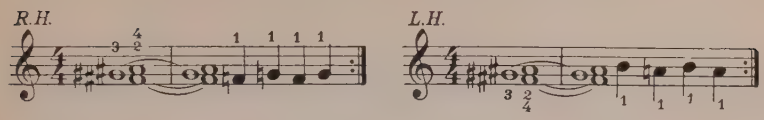
(To be played an octave higher.)



The fingers 2, 3 and 4 rest on the keys, as in the last exercise. The thumb strikes a key that lies under the hand. This position on the black keys makes it easier for the thumb to pass under the hand, and enables the pupil to start his thumb work with a shorter reach than he could find on the white keys. The thumb must not be raised too high, and must make a very light tone, otherwise the hand could not remain quiet.

EXERCISE (c) *The thumb learns to play two consecutive keys under the hand.*

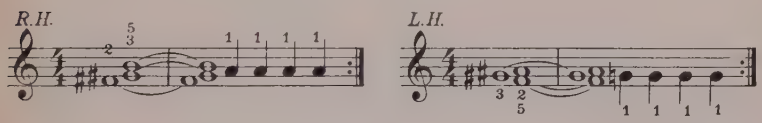
(To be played an octave higher.)



This exercise develops more steadiness in the hand, and more lightness in the thumb. It also trains the thumb to move with greater freedom under the hand.

EXERCISE (d) *The thumb reaches a key farther under the hand.*

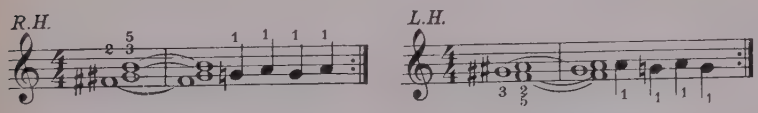
(To be played an octave higher.)



Here the fifth finger helps to steady the hand by resting on *B*♮. The 2nd and 3rd fingers rest on *F*♯ and *G*♯. The thumb strikes *A*♮. In the left hand the 5th finger rests on *F*♮, the 2nd and 3rd on *A*♯ and *G*♯, while the thumb strikes *G*♮.

EXERCISE (e) *The thumb strikes two consecutive keys that are farther under the hand. The fingers rest on the same keys as in the last exercise.*

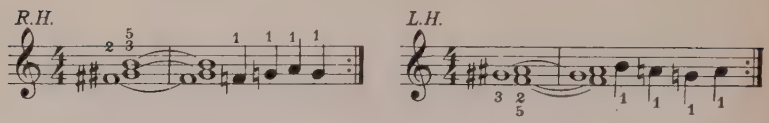
(To be played an octave higher.)



The hand must remain quiet, and the thumb must strike more lightly than before.

EXERCISE (f) *The thumb strikes three consecutive notes under the hand.*

(To be played an octave higher.)



This exercise develops steadiness in the hand, and flexibility in the thumb. After doing these exercises the pupil may work on any of the exercises in Chapters III, IV and V which can be safely undertaken by a small hand.

Appendix II

ORIGIN OF EXERCISES USED IN THIS BOOK

Exercises 34 and 35 are from the *Octave School* by Theodore Kullak.

Exercise 40 is from the *Virtuoso Pianist* by Hanon.

Exercises 6 to 29 inclusive are adaptations of technical exercises used by teachers of the Leschetizky School. The origin of these exercises is not known. Most of them were published in a technical work written by Adolph Kullak, and dedicated to Liszt. Similar exercises were published at about the same time by Villoing, the teacher of Rubinstein.

All the other exercises introduced in this book are original. They have been used by me for many years, and also by teachers who have studied with me.

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